# **Agency Responses**

This section presents letters written by public agencies in response to the DEIR, and CDF's responses to the letters. The public agencies that submitted comments are:

- 1. County of Mendocino Planning and Building Department
- 2. County of Mendocino Board of Supervisors
- 3. U.S. Fish and Wildlife Services
- 4. U.C. Cooperative Extension
- 5. Air Quality Management District
- 6. State Department of Fish and Game
- 7. California Water Quality Control Board, North Coast Region
- 8. State Department of Parks and Recreation, Mendocino District
- 9. State Department of Transportation
- 10. State Department of Conservation
- 11. National Marine Fisheries Service

Each agency's letter is reproduced, showing the "comment number" assigned to the individual comments set forth in the letter. Immediately following the agency's letter, CDF's letter responding to that agency's comments is reproduced.

GP-47



# County of Mendocino Department of Planning and Building Services

TELEPHONE 707-463-4281 FAX 707-463-5709 PBS@CO.MENDOCINO.CA.US

Raymond Hall, Director

501 Low Gap Road · Room 1440 · Ukiah · California · 95482 www.co.mendocino.ca.us/planning

June 12, 2002

Christopher P. Rowney Demonstration State Forest Program Manager California Dept. of Forestry & Fire Protection PO BOX 944246 Sacramento, CA 94244-2460

RE: Comments to Draft EIR - Jackson Demonstration State Forest

Dear Mr. Rowney:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the Jackson Demonstration State Forest (JDSF) Management Plan. The area within the boundaries of the demonstration forest has a General Plan designation of Forestlands, and is zoned Timberland Production Zone (TPZ). However, as noted in the DEIR, a state-owned forest is not directly subject to the Mendocino County General and zoning ordinance.

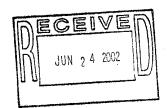
Of concern to our office from a land use perspective is that private properties which border the state forest are afforded adequate consideration. We support the draft Forest Management Plan (DFMP) which states that a 200 foot setback (buffer area) will be maintained whenever the adjacent land owner is a non-industrial timberland owner. As a point of clarification, the FMP should make it clear that the buffer would be located on the state forest property as opposed to the adjacent private property.

Should you have any questions regarding our comments, please contact our office at (707) 463-4281.

Sincerely,

Gary Pedroni Senior Planner

Cc: #ER 4-02



# **County of Mendocino Planning and Building Department** Letter GP-47

STATE OF CALIFORNIA -- THE RESOURCES AGENCY

GRAY DAVIS, Governor

#### DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246 Sacramento, CA 94244-2460 Website: www.fire.ca.gov

R1

(916) 653-7772

**September 10, 2002** 

**Gary Pedroni County of Mendocino Department of Planning and Building Services** 501 Low Gap Road, Room 1440 Ukiah, CA 95482

RE: Response to Mendocino County Department of Planning and Building Services Comments on Draft EIR to the Jackson Demonstration State Forest Draft Management Plan (Reference: GP-47)

Dear Mr. Pedroni:

Thank you for your comments on the Jackson Demonstration State Forest (JDSF) Draft Environmental Impact Report (DEIR). Our response follows below. Please note that the comment numbers are as assigned in Exhibit Letter #47, a copy of which is attached.

- 1. We support the draft Forest Management Plan (DFMP) which states that a 200-foot setback (buffer area) will be maintained whenever the adjacent landowner is a nonindustrial timberland owner.
- 2. As a point of clarification, the FMP should make it clear that the buffer would be located on the State Forest property as opposed to the adjacent private property.

Response to Comments 1 and 2

For the purpose analysis in DEIR, non-industrial adjacent timberland parcel buffer zones were measured from the border between JDSF and adjacent land and extending onto JDSF property. Although the DFMP plan is not precisely worded, it is the intent of CDF to measure the buffer in this way and buffers were so analyzed in the DEIR. No changes to the DEIR of the DFMP are required.

If you have any questions, please contact Chris Rowney, Resource Management at (916) 653-9420 or email at chris.rowney@fire.ca.gov.

Sincerely,

**Ross Johnson Deputy Director** 

Attachment



JDC-48

Kristi Furman Clerk of the Board



TELEPHONE: (707) 463-4221

FAX: (707) 463:4245

E-MAIL: bos@co.mendocino.ca.us

#### COUNTY OF MENDOCINO

BOARD OF SUPERVISORS 501 Low Gap Road • Room 1090 Ukiah, California 95482

June 18, 2002

Andrea E. Tuttle, Director California Department of Forestry P.O. Box 944246 Sacramento, CA 95814 RECEIVED BY Director's Office

JUN 2 4 2002

Department of Forestry and Fire Protection

Dear Ms. Tuttle:

Thank you for the opportunity to have input to the newly drafted Jackson Demonstration State Forest management plan and EIR. I hope that in your continued deliberations and discussions regarding the plans your two agencies will consider the implications of your decisions on the people and communities of Mendocino County.

Unfortunately, due to scheduling constraints the Mendocino Board of Supervisors did not have the opportunity for a comprehensive discussion regarding the merits of either plan. However, both the Board and its standing committee, the Mendocino Forest Council, have been involved in protracted discussions regarding management planning for JDSF since the summer of 1997. Because of these extensive deliberations the Board feels quite confident in forwarding these comments for your consideration. It is the position of the Board of Supervisors that the demonstrative mission of JDSF be upheld and pursued.

To that end, the Board also wishes to remind CDF that some of the demonstrations projects should be aimed toward non-industrial forest land owners who own approximately 53 % of commercial timberland in the County and who's needs are dramatically different than those of industrial ownerships.

Secondly, it is the position of the Board of Supervisors that CDF and the Board of Forestry should consider pursuit of management options and projects that minimize the reliance on the need for petrochemical inputs in order to ensure their success. As the world grapples with the challenges associated with resource depletion and global climate change it will be crucially important for places like JDSF to help answer some of these difficult issues that will be facing future generations.

#### THE BOARD OF SUPERVISORS

MICHAEL M. DELBAR First District RICHARD SHOEMAKER Second District TOM LUCIER
Third District

PATRICIA A. CAMPBELL Fourth District J. DAVID COLFAX Fifth District Page 2 of 2 June 18, 2002

Thirdly, the Board wishes to compliment CDF for allowing public input into the management plan development process as it provides transparency to a complex process that often leaves people feeling disconnected and frustrated. Given the long and positive relationship that JDSF and the County of Mendocino have shared we would hope that CDF and the Board would consider a permanent mechanism that could allow for regular input into future management decisions and directions. Just as we have seen forest management change dramatically since the inception of JDSF, we believe that future changes will be equally dramatic and exciting and we would hope that the people and communities of Mendocino could be involved in those discussions.

On behalf of the people of Mendocino County, thank you for the opportunity to reply. We look forward to continued opportunities to cooperatively manage the resources of our County and our communities.

1/2 /2 100

Sincerely

J. David Colfax, PhD.

Chairman, Mendocino County Board of Supervisors

c: Board of Supervisors State Board of Forestry Forest Council

# County of Mendocino Board of Supervisors Letter JDC-48

STATE OF CALIFORNIA--THE RESOURCES AGENCY

GRAY DAVIS, Governor

#### DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246 Sacramento, CA 94244-2460

Website: www.fire.ca.gov

(916) 653-7772

R1



**September 10, 2002** 

J. David Colfax County of Mendocino Board of Supervisors 501 Low Gap Road, Room 1090 Ukiah, CA 95482

RE: Responses to County of Mendocino Board of Supervisors Comments on Draft EIR to the Jackson Demonstration State Forest Draft Management Plan (Reference: JDC-48)

Dear Members of the Board:

Thank you for your comments regarding the Jackson Demonstration State Forest (JDSF) Draft Environmental Impact Report (DEIR). Our responses follow below. Please note that the "Response numbers" correspond with the comment numbers as assigned in Exhibit Letter #48, a copy of which is attached.

1. Some of the demonstrations projects should be aimed toward non-industrial forestland owners who own approximately 53% of commercial timberland in Mendocino County and whose needs are dramatically different than those of industrial ownerships.

#### **Response to Comment #1:**

Overall, the management practices proposed in the JDSF Draft Forest Management Plan (DFMP) and considered in the DEIR will be directly applicable to many small non-industrial landowners in the County. The implementation of a range of uneven-aged silvicultural methods will provide small landowners an on-the-ground example of single-tree, cluster, and group selection systems that are typically used on non-industrial timberlands. Additionally, the even-aged methods that are proposed will provide a viable demonstration and potential research area for this widely used form of forest management. The road management plan provides small landowners a "template" to use if they desire to include that type of management consideration in their timberland management documents. Nearly all other aspects of the DFMP have the potential to provide the public and small non-industrial landowners with practical forest management practices, as well as an opportunity for on the ground examples.

2. The Department of Forestry and Fire Protection should consider pursuit of management options and projects that minimize the reliance on the need for petrochemical inputs in order to ensure their success.

#### **Response to Comment #2:**

As stated in Section 8.2, *Hazardous Materials*, of the DEIR (p. 317-319), potential petrochemical use is addressed, as well as the emphasis on non-petrochemical options. The DFMP and DEIR emphasize various measures to prevent infestations of invasive and ecologically detrimental species, as well as



measures to combat infestations in the event that they occur. The preferred choice is not the use of chemicals, but rather Integrated Weed Management (IWM), Integrated Pest Management (IPM), and mechanical controls. Appropriate silviculture techniques that consider the potential for invasive, exotic, and/or unwanted species is the first management step to prevent the initial site occupation of these species. In the event that these silviculture prescriptions are not successful, IWM, IPM, and mechanical control strategies are then implemented.

The Citizen's Advisory Committee that was appointed by the Director in 1997 found general public concern over pesticide use, specifically herbicides. Herbicide use has been minimal within the past ten years, as evident by only 3.8% of the total area within JDSF receiving treatment (CDF correspondence with the Mendocino Agricultural Commissioner). Due to the level of concern and emphasis on alternative approaches to herbicide use, JDSF will continue to minimize reliance on chemical treatments.

3. The Department and Board of Forestry should consider a permanent mechanism that could allow for regular input into future management decisions and directions for the Forest.

#### **Response to Comment #3:**

The DFMP does not establish a formal mechanism by which comments from the County of Mendocino Board of Supervisors may be heard. County input in the form of agency comments regarding future CEQA review for individual projects will continue to be received by CDF. The State Forest Advisory Committee may provide an additional means of input for the County (DFMP, p. 62). The Committee provides overview and assists in the identification and prioritization of research and demonstration projects. The Committee is appointed by and serves at the pleasure of the Director of CDF and provides a source of council on specific issues brought to the Committee by the Director or staff on behalf of the Director. The Committee represents the entire State Forest system, with individual members of the Committee representing specific State Forests.

If you have any questions, please contact Chris Rowney, Resource Management at (916) 653-9420 or email at chris.rowney@fire.ca.gov.

Sincerely,

Ross Johnson Deputy Director Resource Management

Attachment

BH-49



### United States Department of the Interior

FISH AND WILDLIFE SERVICE Arcata Fish and Wildlife Office 1655 Heindon Road Arcata, CA 95521 (707) 822-7201 FAX (707) 822-8411



IN REPLY REFER TO

1-14-TA-2002-1304

June 24, 2002

Mr. Christopher P. Rowney
Deputy Chief, State Forest Program
California Department of Forestry and Fire Protection
P.O. Box 944246
Sacramento, CA 94244-2460

Subject: Comments on Draft Environmental Impact Report for the Jackson Demonstration State Forest

Dear Mr. Rowney:

The U.S. Fish and Wildlife Service (Service) is pleased to provide comments on the draft Environmental Impact Report (EIR) for the Jackson Demonstration State Forest (JDSF) Management Plan received in this office May 22, 2002. Due to limited staff time, the Service was unable to conduct a comprehensive review, and opted to focus on those aspects of the plan relating to the management and conservation of marbled murrelets (*Brachyramphus marmoratus*; MAMU). Under the federal Endangered Species Act of 1973, as amended, MAMU is listed as threatened and JDSF is designated as MAMU critical habitat.

The discussion on page 248 regarding the status of MAMU on the adjacent Russian Gulch State Park is incorrect. There have been numerous MAMU detections since 1976 in Russian Gulch. Many of the surveys for MAMU in the inland portions of this State Park have resulted in detections, including "occupied" detections that indicate that birds are almost certainly nesting in this area. Accordingly, the Service considers Russian Gulch State Park to be an occupied nesting area for this species. The consistent presence of MAMU in the nearby offshore waters during the breeding season further supports this determination. Russian Gulch State Park is only one of four known inland sites in MAMU Recovery Zone 5 (Mendocino County, Sonoma County, and areas south to San Francisco Bay). Therefore, considering the continuing threats and declines this species is facing, the Service considers Russian Gulch and nearby areas to be exceedingly important to MAMU survival and recovery.



While the actual status of MAMU on JDSF is unclear, since they have been detected within a few hundred meters it is possible that they nest on JDSF. It was unclear in the EIR the circumstances under which JDSF personnel would consult with the California Department of Fish and Game (CDFG), and/or request technical assistance from the Service, prior to any operations that could result in unauthorized take. CDFG and/or the Service should be contacted prior to any operations, including hazard tree removal and salvage operations, that could alter potential MAMU habitat or create disturbance within 1/4 mile of potential habitat during the breeding season (March 24 - September 15). In addition, since Russian Gulch is occupied, consultation and/or technical assistance should be conducted whenever potentially disturbing operations may occur during the breeding season within 1/4 mile of Russian Gulch (½ mile if helicopter operations are an option), or if habitat could be altered within 300 feet of Russian Gulch State Park.

Considering the importance and proximity of Russian Gulch to JDSF, the Service requests that consideration be given to measures that could be highly beneficial to MAMU. Specifically, the Service recommends that areas on JDSF adjacent to Russian Gulch be included as a research area for the purpose of developing silvicultural prescriptions intended to improve or develop suitable MAMU nesting habitat. This type of innovative demonstration is consistent with the mission of JDSF and would provide information useful to both public and private land managers. At present, there are no such prescriptions available although the Service has received numerous requests from the public and timber industry for information on this subject. Furthermore, the Service is unaware of any location in California which offers a better opportunity to conduct such a demonstration (i.e., an occupied MAMU site directly adjacent to public lands that can be actively managed). The Service supports those aspects of the proposed management plan that involve the retention of old-growth stands, Late Successional Development Areas, and other ( Special Concern Areas that could benefit MAMU. However, appropriate management of areas in JDSF along Russian Gulch proper and the unnamed creek to the south of Russian Gulch proper have a greater likelihood of providing for the recovery of this species. The Service is available to assist JDSF personnel in planning and implementing any necessary MAMU surveys, and developing appropriate silvicultural prescriptions and study designs.

With one reservation, the Service supports the retention of individual and aggregations of old-growth trees throughout JDSF as described on pages 171-172 of the EIR. There is a large and ever-growing body of literature that indicates the importance of these residual old-growth trees to both MAMU and other species including many listed as "Species of Special Concern" by the State of California. The importance of these trees is especially evident in intensively managed redwood (Sequoia sempervirens) forests such as JDSF; page 153 of the EIR indicates that "...the Forest is generally lacking large decadent trees, large snags, large down woody debris (LWD) and multi-story canopy structure." Given the high value of these trees to wildlife and their irreplaceable nature, the Service recommends that the conditions on page 172 under which they can be cut should be further restricted. As stated, these conditions can be met in a wide variety of situations where project expediency is the priority. Conversely, the Service thinks that projects should be planned in such a way that priority is given to maintaining these structures.

8

For example, if work can not be conducted safely in the vicinity of one of these trees, the project For example, if work can not be conducted sarely in the vicinity of one of these trees, the project should be altered or not conducted rather than simply removing the tree. The Service realizes that in some situations, such as a hazardous tree near a residence, these trees may unfortunately need to be removed.

If you have any questions regarding this correspondence, please contact Mr. John Hunter of my staff at (707) 822-7201.

Project Leader

cc;

Ms. Kathy Bailey, Sierra Club, Philo, CA

Ms. Renee Pasquinelli, California Department of Parks and Recreation, Mendocino

Mr. Brad Valentine, CDFG, Yountville

#### U.S. Fish and Wildlife Services Letter BH-49

STATE OF CALIFORNIA--THE RESOURCES AGENCY

GRAY DAVIS, Governor

#### DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246 Sacramento, CA 94244-2460 Website: www.fire.ca.gov (916) 653-4995

**R34** 

**September 12, 2002** 

Bruce G. Halstead, Project Leader **USDI Fish and Wildlife Service Arcata Fish and Wildlife Office** 1655 Heindon Road Arcata, CA 95521

Dear Mr. Halstead:

Thank you for your comments on the Jackson Demonstration State Forest (JDSF) Draft Environmental Impact Report (DEIR). Our responses follow below. Please note that the "Response numbers" correspond with the comment numbers as assigned in Exhibit Letter #BH-49, a copy of which is attached.

Response to Comment 1. The results of the CNDDB query completed in preparation of this document (See page 225 of the DEIR) did not indicate that murrelets occur in the vicinity of Russian Gulch State Park. However, based on the information provided in comments on the DEIR and through subsequent discussion with Rene Pasquinelli (Senior Park Ecologist) of the Russian Gulch State Park, the language of the first paragraph on page 248 of the DEIR will be changed to read as follows: "There have been numerous inland detections near JDSF. The first detection was in Russian Gulch State Park in 1976 (Paton and Ralph 1988), and the second detection was apparently 1km (0.6mi.) east of the town of Mendocino in 1988 (F. Sharpe, personal communication, as cited in Paton and Ralph 1988). According to Rene Pasquinelli (Personal communication), surveys completed annually over the last five years within Russian Gulch State Park have detected numerous murrelets flying up the Russian Gulch drainage, including "occupied behavior" type observations. Although no nest trees have been identified, this information suggests that murrelets are nesting in the Russian Gulch State Park."

A sentence will also be added to the end of the second paragraph on page 248 of the DEIR to read as follows: "However, potential murrelet habitat was identified by Ken Hoffman (USFWS) on former G-P lands in the vicinity of the Mendocino Woodlands Recreation Area (R. Pasquinelli, Personal Communication)."

Response to Comments 2, 3 and 4. All stands occupied by murrelets, and potential habitat for murrelets, including Russian Gulch State Park, will be protected and/or provided buffers on a project basis through consultation with CDFG.



Standard protection buffers for stands occupied by murrelets include:

- 300-foot "No Cut" zone
- Consultation with DFG is required when operations are proposed to occur within 0.25 miles of potential habitat, extending to 0.5 if helicopter yarding is planned.

As described in the FPR, State Park Special Treatment Buffers shall be a minimum of 200 feet.

Please refer to the discussion on pages 246-247 regarding the decline of murrelets and their habitat.

Response to Comments 5 and 6. Please refer to General Response 1 and 5. The area in question has not been harvested in the last 20 years (Figure L), is primarily composed of the Redwood/Douglas fir, 18 inch and larger, moderate to dense vegetation types (Figure F), is allocated for uneven-aged silviculture treatment (Figure M) and does not have any proposed harvesting within the short term (Figure M). The past management of JDSF, and the proposed management direction provided in DFMP provide for appropriate management of areas in the vicinity of Russian Gulch State Park. Although not directly assessed in the DEIR, the DFMP also includes a discussion on the process JDSF will use for identification and prioritization of future research and demonstration projects.

In light of your comments and others, notably California State Parks and Recreation and the Sierra Club, CDF will designate a mapped area within Russian Gulch watershed for management to accelerate the recruitment of late-seral forest conditions. The area, consisting of approximately 450 acres, will use silvicultural stand management with the specific intention to accelerate the development of large trees with appropriate canopy closure and other habitat features as identified to increase future marbled murrelet habitat. CDF will consult with the US Fish and Wildlife Service and the California Department of Fish and Game on the development of appropriate silvicultural prescriptions to be applied.

The designated area for this research/demonstration effort shares a border approximately 0.5 miles wide with the Woodlands Special Treatment Area near Road 408, creating a potential future flyway consisting of contiguous late-seral forest habitat.

Response to Comments 7, 8 and 9. Please refer to General Response 1. Old growth trees are defined and will be retained as described in the DFMP, old-growth trees will be retained except under very limited exceptions such as when they pose a safety hazard or lie in a road alignment. Additionally, surveys of potential murrelet habitat will be completed for proposed projects so no occupied stands will be harvested. This coupled with the fact that not all old-growth trees on JDSF are considered suitable murrelet habitat, the cumulative loss of murrelet habitat as a result of the proposed management of JDSF is expected to be minimal to non-existent. Additional evaluation will be completed on a project basis.

66 - 75



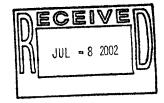
# UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION Mendocino County



579 Low Gap Road, Ukiah, CA 95482
Phone: (707) 463-4495 Fax: (707) 463-4477 Email: <u>cemendocino@ucdavis.edu</u>

July 2, 2002

Christopher Rowney California Dept. of Forestry and Fire Protection 1416 9th Street P.O. Box 944246 Sacramento, CA 94244-2460



Dear Mr. Rowney,

I hope this letter finds you well. Thank you for the opportunity to submit comments on the current draft of the Jackson Demonstration State Forest management plan and Draft Program Timber Environmental Impact Report (DTPEIR). My comments are provided in the hopes that they will be useful in the further development of the draft plan. I have limited my comments to those sections that I feel qualified.

Forest Management. The plan currently acknowledges that harvest has averaged approximately 1.5 POI over any rolling five-year period. This recognition and statement is very powerful and cannot be understated. As you know, Mendocino County advanced a set of county rules to the Board of Forestry in 1994 with the rule package premised on a limitation of harvest based on POI. The Board of Supervisors has never rescinded their decision to forward the rule package, therefore establishing a defacto county policy on the matter. Maintaining current levels of harvest into the future based on POI should be considered a strong suit of this plan.

Forest Structure. The acknowledgement of the average forest inventory approximating 43 mmbf/acre again is a very powerful statement. JDSF continues to demonstrate the resilience of the redwood type and how the role of conservation can be used to discuss restoring biological integrity of depleted forests.

Wildlife, Fish and Plants. The plan acknowledges the presence of old-growth stands and trees across the forest. In light of the current depletion of old growth redwood acreage across its range, it is important for JDSF to represent an important link to the past by providing an example of the north coast's lost natural heritage. The plan acknowledges the tenuous nature of defining old growth but a definition should be adopted. I suggest that CDF review the definition presented by Noss¹ and consider adopting a definition that has been cited in the literature. At best, the plan should consider a definition of "old-growth," "late-seral," and "mature" to help the reader delineate the differences between the uses of these terms. This would make a stronger document.

Of equal importance is the articulation of how adjacency issues will be addressed to protect late-seral stand conditions. The current plan does not clearly address the juxtaposition of proposed even-aged management activities and how these may affect late-seral forest components. A map overlay identifying the locations of the old-growth in combination with silvicultural allocations would help address the question.

Snag Retention, Recruitment. The plan suggests that snags of less than 11 inches are of limited value based on work of Thomas et. al. 1979 in Eastern Oregon. Though an important point that



2

should be retained in the plan, I suggest amending the wording so that the plan is based on geographically appropriate literature<sup>9,10,11</sup>. Furthermore, a recognition that snags < 11" dbh have ecological value would strengthen and add significant credibility to the document. Based on my own research of old-growth coastal redwood stands, the primary "snag-like" element found in local forests are commonly referred to as "goose-pens." Though limited, some scientific literature is available explaining the role they play. A recognition of their role in the redwood type would greatly enhance the strength of the plan.

Biological Diversity. Certainly this is an important concept in the redwood region and needs to be included in the plan. Recent literature? suggests that management considerations be expanded beyond simple discussions focusing on species richness. In the paper I have cited, the authors discuss the need to recognize management implications on biological integrity not simply numbers. In light of the current discussion focusing on CWEs, endangered species and their habitats, and the role of natural disturbance patterns, I suggest a section explaining how management scenarios will be developed to maintain forest integrity by addressing those forest components most sensitive to disturbance i.e. water quality, late-seral habitats. Any data that could be included to support the assumptions would greatly enhance the credibility of the plan.

Certainly, given the context of this topic, it will be imperative that the plan and the DPTEIR identify how the proposed even-aged management will not perpetuate the existing conditions that are affecting the conservation of biological diversity across the forest particularly as the topic relates to non-vascular plants. I suggest a review of the literature cited by Noss to help address some these questions.

Wildlife Habitat. Many highly qualified people with expertise in conservation biology, ecology and the like have expressed concerns for the depletion of redwood forest wildlife. It is critical for all elements of this plan to provide objective reasoning and justification for the planning approach. For example, the second sentence states, "To many people, timber management is synonymous with habitat damage" (pg. 30). In some situations, this statement is correct. Norris³ reports how as many as nine species of bryophytes have been eliminated from old-growth forests following harvest. Hoekstra et al.⁴ have demonstrated how soil arthropod abundance is negatively impacted by short-rotation, selective harvests. Bury⁴, Welsh⁵ and Bury and Martin⁶ have all demonstrated how herpetofauna populations and biomass are impacted following timber harvest. In strict ecological terms, when a species is negatively impacted by a land-use practice, one could arguably consider the action to be synonymous with habitat damage. It is important to avoid statements that may be construed as advocacy positions for timber harvesting without adequately addressing other resource values.

Even-Aged Management. The plan recognizes the desire for "some individuals" to have a cessation of even-aged management on JDSF (pg. 31). However, the plan fails to recognize that these individuals included the Citizen Advisory Committee formed by CDF to provide guidance and input to the planning process. Some CAC members will certainly view the omission of identifying the group who provided this input as inflammatory. I suggest acknowledging the source of this position. The DPTEIR (pg. 159) recognizes the potential implications of even-aged management when considered on a watershed scale. However, the plan fails to recognize this point and appears to have identified stands slated for this management based purely on silvicultural criteria. These two plans should be written in such a manner to minimize confusion on the part of the reader.

-Habitat Fragmentation and Connectivity. The description of needs and priorities in this section is laudable. However, a description of CWHR habitat types and seral stages graphically demonstrated across the forest would help in the assessment of recognizing fragmentation and connectivity priorities. Simply adding this component, in map form, at the end of both the DPTEIR and the plan would greatly strengthen the document. Furthermore, this type of information could then be used to validate some of the assumptions, and other questions (issues of adjacency, connectivity, fragmentation) could then be easily articulated and visualized.



3

Even-Aged Management. The argument for even-aged management is advanced by the erroneous assumption that "...stand structure is often produced naturally be severe fires or windstorms where all but a few of the hardiest individuals survive." To my knowledge, scientific evidence does not support the position for the redwood type found along the northern coastal range for this species. Noss¹ provides a thorough discussion based on the existing literature dealing with natural disturbance patterns in coastal redwoods. Though fire occurred regularly (as often as a seven year cycle in the southern portion of its range), catastrophic stand replacement fires prior to the commencement of logging are considered rare events.

The plan advances, in part, the justification of even-aged management based on wildlife needs. Short-duration, even-aged silviculture tends to favor early and mid-seral stage organisms who can readily exploit the structural and composition components of the stands. There is little scientific literature arguing in favor of meeting the habitat suitability for these species (at least in the redwood type). The only legitimate argument should be based purely on silviculture and the need to regenerate stands in order to produce wood products. [That said, I am apprehensive about using even-aged management on fully stocked stands because of its lack of replication to natural disturbance and its potential ecological ramifications.]

Additionally, the concept that even-aged silviculture could provide structural elements spatially allocated to provide suitable characteristics is based on the flawed premise that desirable elements can be developed in the 60-120 year harvest cycles. The plan is attempting to justify a particular land-use practice for wildlife benefits that is not well supported in the literature. For example, Gellman and Zielinski<sup>6</sup> and Rainey et al.<sup>7</sup> have shown how bats selectively seek out large basal cavities (often called goose pens) for roosting sites. These characteristics (most particularly those associated with older forests) cannot be attained within the context of even-aged management described in the plan.

I certainly recognize the need to evaluate the relationship between silvicultural treatments and wildlife response in the redwood type. I would suggest that in order to address some of the criticism that will surely be raised because of this section, the Department consider developing a Technical Advisory Committee for JDSF that can develop criteria to evaluate any even-aged projects prior to their implementation. This idea is based on my knowledge of how the University's Research and Extension Centers use a similar approach to recruit, evaluate, and monitor projects. This type of an approach would increase the credibility of the plan and the projects being proposed and conceivably be used to evaluate all harvest proposals. In addition to the development of comprehensive plans, this approach could also provide strong demonstration examples with validated results.

Exotic Species. The plan provides the reader a limited understanding of the extent of the problem. Though clearly the plan considers exotic vegetation a problem, it fails to delineate its scope thereby leaving the reader with more questions than answers. Additionally, the plan appears to be contradictory in some areas. For example, the plan states that, "Integrated Weed Management (IWM) emphasizes control of the environmental conditions that cause or promote weed infestations," furthermore the plan states part of the overall IWM strategy is to, "Prevent dispersal of exotic weeds into new areas." In light of the previous section dealing with even-aged management, how are the obvious contradictions in these two sections to be resolved? Specifically, how will increase light levels and soil disturbance produced from even-age silviculture provide a consistent message with the principles of IWM? The plan seems to provide incongruent logic when the two sections are compared.

As you are aware, the use of herbicides on JDSF was a primary source of local discontent that led to the formation of the Citizens Advisory Committee (CAC). The sections in the plan that currently address herbicide use and exotic weed management fail to recognize the volatility of this issue. The plan should specifically delineate how extensive the exotic weed problem is, alternative methods that



could be used to manage competing vegetation in even-age stands and how alternative silvicultural practices could be employed to minimize the need for chemical controls.

Habitat Management Practices. Understandably, the plan limits its acknowledgement of selected wildlife species. However, the plan makes assumptions regarding harvest impacts on these species without providing the benefits of validated data. The plan would be significantly stronger if WHR assessments were provided for the identified species. It would provide both the reader and CDF an assessment of the risk each species may be subjected to under the proposed management scenario.

Watersheds. Again, there seems to be some contradictory language in the section dealing with Riparian Management. The plan calls for a goal of establishing late-seral forest conditions but then proceeds to suggest a level of harvest within the WLPZ that will leave the "ten largest confers per 330 feet of stream channel." Though commendable, this practice appears arbitrary and seems to limit the understanding of riparian zone functionality to only LWD recruitment. It is not clear in the plan if the zones will be harvested on a 20 year cycle, and if every 20 years only the largest trees at the time will be left, or if once a desired condition is met, the zones will then be exempt from future extraction. Ideally, the plan offers an opportunity to demonstrate alternative, performance-based practices that could serve as future demonstrations for innovative approaches to WLPZ management. Those alternatives are too numerous to list here. Suffice to say that a performance-based strategy could incorporate a multi-faceted strategy that could be used to demonstrate alternative management approaches over time.

I hope these comments are useful. I am willing to discuss any of my ideas with you or any member of your staff.

( MS

Sincerely

<sup>&</sup>lt;sup>1</sup> Noss, R. 2000. The Redwood Forest. History, Ecology and Conservation of Coast Redwoods. Island Press. Covelo, Ca. 335 pp.

<sup>&</sup>lt;sup>2</sup> Angermeier, P. L. and J. R. Karr. 1994. Biological Integrity versus Biological Diversity as Policy Directives. Bioscience 44(10) 690-697.

<sup>&</sup>lt;sup>3</sup> Norris, D. H. 1987. Long-term results of cutting on the bryophytes of the Sequoia sempervirens forest in northern California. In Procs, T., et al. (eds) Symp. Biologica Hungarica. 35: 467-473. IAB Conf. Of Bryoecology. Budapest-Vacratot Hungary Aug. 5-10, 1985.

<sup>&</sup>lt;sup>4</sup> Bury, R.B. 1983. Differences in amphibian populations in logged and old-growth redwood forest. NW Sci. 57(3):167-178.

<sup>&</sup>lt;sup>5</sup>Weish, H.H., Jr. and A.J. Lind. 1988. Old growth forests and the distribution of the terrestrial herpetofauna. In Szaro, R.C., K.E. Sieverson and D.R.Patton (eds). Mngt. Of amphibians, reptiles and small mammals in North America. Gen. Tech. Report RM-166, USDA FS, Rocky Mtn. Sta. Ft. Collins, Co, pp 439-458.

<sup>&</sup>lt;sup>6</sup> Bury, R.B. and M. Martin. 1973. Comparative studies on the distribution and food of Plethodontid salamanders in the Redwood Region of northern Californian. J. Herp. 7(4):331-335.

<sup>&</sup>lt;sup>7</sup>Gellman, S.T. and W. J. Zielinski. 1996. Use of bats of old-growth redwood hollows on the north coast of California. J. Mammal. 77(1):225-265.

<sup>&</sup>lt;sup>8</sup> Rainey, W.E.,E.D. Pierson, M. Colberg and J. H. Barclay. 1992. Bats in hollow redwoods: Seasonal use and role in nutrient transfer into old growth communities. Bat Res. News 33(4):71.

#### **Section III Agency Responses**

5

<sup>&</sup>lt;sup>9</sup> Gale, R.M. 1973. Snags, Chainsaws and Wildlife: One Aspect of Habitat Management. Cal-Neva Trans. West. Sec. Wildlife Soc. Feb. 1-3, 1973. pp. 97-111.

<sup>10</sup> Ohmann, J. L. 1992. Wildlife Habitats of the North Coast of California: New Techniques for Extensive Forest Inventory. PNW-RP-440. USDA-PNW Res. Sta. Portland, OR. 48 pp.

<sup>11</sup> Zeiner, D.C., W.F. Laudenslayer, Jr., K. E. Mayer, and M. White. 1990. California's Wildlife Vol. II Birds. CWHR System. State of Calif. Dept. of Fish and Game. 732 pp.

# U.C. Cooperative Extension Letter GG-75

STATE OF CALIFORNIA--THE RESOURCES AGENCY

GRAY DAVIS, Governor

#### DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246 Sacramento, CA 94244-2460 Website: www.fire.ca.gov (916) 653-7772



**R34** 

**September 13, 2002** 

Gregory A. Giusti Forest Advisor UC Cooperative Extension 579 Low Gap Road Ukiah, CA 95482

RE:Responses to UC Cooperative Extension Comments On Draft EIR to the Jackson Demonstration State Forest Draft Management Plan (SCH #2000032002) - Reference: GG-75

Dear Mr. Giusti:

Thank you for your comments on the Jackson Demonstration State Forest (JDSF) Draft Environmental Impact Report (DEIR). Our responses follow below. Please note that the "Response numbers" correspond with the comment numbers as assigned in Exhibit Letter #75, a copy of which is attached.

The comments generally address concerns with the Draft Forest Management Plan (DFMP) and do not necessarily address the content of and the impacts analysis in the DEIR. A number of the comments explicitly express a difference in opinion regarding the management measures and practices proposed in the DFMP. Where your comment is focused on a specific proposed management measures and/or practice, the responses provided directs you to the appropriate section or sections of the DFMP or DEIR. Where your comment raises issue related to a potential significant environmental effect, or to the content of the DEIR, a more detailed response is provided.

#### Response to Comment #1

The protection and identification of old-growth is clearly spelled out in the DFMP. No single definition can encompass all aspects of old-growth, which could potentially include values related to forest development and succession, wildlife habitat, and human interest. Groves of old-growth forest have been identified and mapped, and will be preserved. The DEIR Appendix 2 provides a definition for old-growth forest. Additionally, old-growth trees are defined in the DFMP as any live tree regardless of age, size, or species that was present in the original stand before the first historic logging on JDSF (1860) (DFMP page 111). Old-growth tree protection standards are clearly outlined in the DFMP. In addition, a definition of old-growth stands or aggregations is provided in the DFMP as intact remnant stands of at least two

acres in size. Old growth trees, forests and proposed management activities relating to old growth are further discussed on page 14 and pages 59 thru 61 of the DFMP. Late seral/late successional is also defined on page 111 of the DFMP.

#### Response to Comment #2

The DFMP includes Late Seral development areas adjacent to three of the eleven old growth groves. The rest of the groves are located within uneven-aged timber management areas or are buffered by a riparian protection zone.

#### **Response to Comment #3**

The DFMP recognizes that snags less than 11 inches dbh have ecological value, although the value is limited to when compared to larger snags. Old growth trees with goose-pens will be retained as indicated in the DFMP and DEIR.

#### Response to Comment #4

The DFMP and DEIR address preservation of water quality, development of late seral habitat characteristics and the maintenance and development of other habitat characteristics that contribute to biological diversity. Biological diversity within even-aged management areas will be promoted through use of the proposed reserved form and storied stand silviculture methods, use of rotation ages that vary from 60 to 150 years and retention and recruitment of structural complexity at a landscape level.

#### Response to Comment #5 and #6

The DEIR is neutral in terms of the proposed action, and strives to present an unbiased review of potential impacts that may result from the proposed action. One of the activities included in the proposed action is the management of timber stands using silvicultural methods. While the DFMP may be considered an advocate for this activity, the EIR is neither promoting nor opposing the activity, but providing a neutral review of the potential environmental impacts and presenting mitigations to minimize impacts where appropriate.

#### **Response to Comment #6**

**See Response to Comment #5.** 

#### Response to Comment #7

As discussed in the DEIR, the CWHR typing for the Forest used in the DEIR analysis is based on a "crosswalk" from timber inventory polygons to CWHR polygons. The crosswalk procedure is provided in Appendix 8 of the DEIR. JDSF staff is in the process of updating the CWHR typing for the Forest, and revised information and maps will be included in future Management Plan revisions.

#### **Response to Comment #8**

The DEIR does not advance or provide justification for the use of even-aged silvicultural methods for wildlife needs. However, the DEIR does provide a discussion of the current vegetation patterns and wildlife habitat across the Forest, and an analysis of how each of the alternatives would likely affect vegetation and habitat. The analysis indicated that alternatives that precluded the use of even-aged silviculture methods would likely cause early successional habitat levels to decline below current levels. This shift in habitat would benefit some species and harm others. The DEIR does provide a discussion and analysis of silvicultural systems and the effects to production of wood products.

#### Response to Comment #9

The DEIR provides a discussion and analysis of the potential for late seral forest characteristics to develop over the short term and long term. The DEIR states that late seral characteristics are not likely to develop in the short term and only begin to develop in the long term. However, the DFMP indicates that JDSF will retain and recruit structural complexity at a landscape level and retain and recruit structural habitat elements within harvest units. The DFMP does not propose the use of even-aged management for wildlife benefits. The DFMP proposes specific actions to retain and recruit wildlife habitat elements that minimize the potential impacts of even-aged management to some wildlife species.

#### Response to Comment #10 and #11

There are eight planned actions associated with the Integrated Weed Management (IWM) strategy listed in the DFMP and evaluated in the DEIR. Action number one on DFMP page 58 commits JDSF staff to considering the impacts of exotic weeds to native vegetation during project development and development of mitigations to minimize the spread of exotic weeds if necessary. As stated in the DFMP, IWM includes direct suppression of weeds as well as modifying environment conditions to suppress or prevent weed establishment. Even-aged silviculture is consistent with IWM. Herbicide use in not precluded in the DFMP as part of IWM and is addressed in the DEIR

Response to Comment #11

See Response to Comment #10.

Response to Comment #12

The DEIR uses CWHR typing in the assessment of wildlife species and potential impacts to wildlife.



#### Response to Comment #13

The DFMP proposes significantly more protection to riparian zones than leaving just the 10 largest conifers per 330 feet of stream channel. Pages 63, 64, 69, and 70 of the DFMP include the riparian management standards for the DFMP that were assessed in the DEIR. The proposed riparian management strategy was designed to be multi-faceted and flexible enough to allow demonstration of alternative approaches over time. Reentry in to Class I riparian zones will be no more frequently than every 20 years. Any entry into the riparian zones will have to comply with the standards included in the Forest Management Plan as well as other applicable rules and regulations.

If you have questions regarding these comments, please contact Chris Rowney, Resource Management at (916) 653-9420 or e-mail at <a href="mailto:chris.rowney@fire.ca.gov">chris.rowney@fire.ca.gov</a>.

Sincerely,

Ross Johnson Deputy Director Resource Management

Attachment

CB-118

306 East Gobbi Street Ukiah, California (707) 463-4354 Fax: (707) 463-5707

C. D. WOLBACH, Ph.D. Air Pollution Control Officer DONNA ROBERTS NASH Office Manager

#### COUNTY OF MENDOCINO AIR QUALITY MANAGEMENT DISTRICT UKIAH, CALIFORNIA 95482

June 03, 2002

Chris Rowning California Department of Forestry and Fire Protection P.O. 944246 Sacramento, CA 94244

Subject: District comments on JDSF Management Plan Draft Environmental Impact Report

Mr. Rowning,

The District has received and reviewed a copy of the Jackson Demonstration State Forest Management Plan Draft Environmental Impact Report. The District has the following comments at this time -

1.) Page 101, immediately above section 5.2 - MCAQMD does not actually issue a "burning permit" (one that allows burning by itself), the District issues an Air Quality permit which can serve as a burn permit with local fire agency approval. The actual permit that most agencies in the county issue is an "interagency burn permit" which meets both the Air Quality and Fire Agency requirements. When CDF "self issues" a burn permit it is actually issuing an "interagency burn permit" this also acts as an Air Quality Permit. While it is somewhat confusing, the purpose of the "interagency burn permit" is to allow a single permit to serve the needs of both the Fire Agency and Air Quality. While CDF is very good about notifying the District about any scheduled controlled burns, notification is required for any burn over 10 acres and for any wildland fire that is allowed to continue to burn for forest management reasons. The requirements for notification are outlined in the District's Smoke Management Program which the Forest office should have on file.

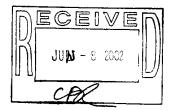
2.) There is a typo on page 104 in the fourth paragraph. The line that currently reads, "Open burning, which may occur during the winter month" should read "Open burning, which may occur during the winter months."

Please feel free to contact the District at (707) 463-4354 with any questions.

Sincerely,

Chris Brown Air Quality Planner

CDB^Planning/JDSF Management Plan July 2002.doc



# Air Quality Management District Letter CB-118

STATE OF CALIFORNIA—THE RESOURCES AGENCY

GRAY DAVIS, Governor

#### DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246 Sacramento, CA 94244-2460 Website: www.fire.ca.gov (916) 653-7772

R1



**September 10, 2002** 

**Chris Brown Air Quality Planner** County of Mendocino Air Quality Management District 306 East Gobbi Street Ukiah, CA 95482

RE: Responses to Mendocino County Air Quality Management District Comments on Draft EIR to the Jackson Demonstration State Forest Draft Management Plan (SCH #2000032002) -Reference: CB-118

Dear Mr. Brown:

Thank you for your comments on the Jackson Demonstration State Forest (JDSF) Draft Environmental Impact Report (DEIR). Our responses follow below. Please note that the comment numbers are as assigned in Exhibit Letter #118, a copy of which is attached.

#### Comments 1 & 2:

Page 101 of the DEIR incorrectly identifies the Mendocino County Air Quality Management District as the issuing agency for a "burning permit." When conducting controlled burns, notification to the District is required for any burn over 10 acres and for any wildland fire that is allowed to burn for forest management reasons.

#### Response to Comments #1 & # 2

DEIR Section VII. 5. Air Quality (page 101) should be amended. The last two sentences of Section 5.1 should be deleted. The following text should be inserted in its place:

The MCAQMD issues an Air Quality permit that can serve as a burn permit with local fire agency approval. CDF may "self-issue" an "interagency burn permit" that meets both Air Quality and Fire Agency requirements. This process allows CDF to streamline the burn permitting process. CDF is required to notify the MCAQMD for any burn over 10 acres and any wildland fire that is allowed to continue to burn for forest management reasons. Notification requirements are outlined in the MCAQMD's Smoke Management Program on file in the JDSF office in Fort Bragg.

#### **Comment 3:**

A typographical error regarding open burning in the winter months on page 104 should be corrected.

#### **Response to Comment #3:**

DEIR Section VII. 5. Air Quality (page 104) should be amended. The fourth paragraph has a typographical and should read, "Open burning, which may occur during the winter months, would be managed and conducted in accordance with the California Forest Practice Rules and in compliance with the MCAQMD open burning regulations."

If you have any questions, please contact Chris Rowney, Resource Management at (916) 653-9420 or e-mail at <a href="mailto:chris.rowney@fire.ca.gov">chris.rowney@fire.ca.gov</a>.

Sincerely,

Ross Johnson Deputy Director Resource Management

Attachment

LW-119



Date : July 11, 2002

To

Mr. Chris Royney

Mr. Chris Royney, Chief Deputy

Department of Forestry and Fire

JUL 1.

From : Larb Week, Chief, Native Anadromous Fish and Watershed Branch

Department of Fish and Game

Subject: Comments on Draft Environmental Impact Report to the Jackson

Demonstration State Forest Draft Management Plan SCH #2000032002

The Department of Fish and Game appreciates the opportunity to review and comment on the Jackson Demonstration State Forest Draft Management Plan Draft Environmental Impact Report. Following are our general and specific comments on this document.

#### General Comments:

The Department of Fish and Game (DFG), in a memorandum dated September 4, 2001, provided the Department of Forestry and Fire Protection The California Department of Forestry (CDF) with a list of recommendations for the April 13, 2001, Jackson Demonstration State Forest (JDSF) Draft Management Plan (DMP). In our view, the recommendations are necessary to protect fish and wildlife resources, and to ensure that project-related impacts are mitigated to below a level of significance under the California Environmental Quality Act (CEQA). The recommendations, specifically, appear in Appendix 6 of the Draft Environmental Impact Report (DEIR), but very few are addressed in a meaningful way in the DEIR. The DEIR, instead, on page 18, states that the document is "generally intended to stand alone and include all information necessary for the reader to understand the project and its effects," and that "all mitigation measures developed in the Final EIR will be incorporated into the approved Final Management Plan." Because the DEIR does not appear to address or consider the Department's potentially feasible recommendations as detailed in our memorandum of September 4, 2001, we question CDF's statements quoted above. DFG, as a result, specifically requests that CDF fully analyze, consider and incorporate into the Final EIR and Final Management Plan our previously-identified recommendations to protect fish and wildlife resources. In DFG's view, revising the proposed project to include our recommendations is necessary to ensure that substantial evidence supports CDF's apparent conclusion that project-related impacts on biological resources are mitigated to below a level of significance under CEQA.

DFG is also concerned that the DEIR fails to address and analyze fire-related environmental affects. As CDF and DFG are both keenly aware, fire plays an important role in forest ecosystems both as a management tool and as unintended natural event. DFG, as a result, recommends that CDF fully investigate the role of fire as a management tool in the proposed project area, as well as consider the reasonably

2

July 12, 2002

foreseeable, fire-related environmental effects that may result directly or indirectly with implementation of the proposed project over time. Specifically, DFG recommends that CDF consider each of the following:

2 1. Fire protection and suppression impacts, direct and indirect, to wildlife (plant and animal) species and habitat; and

2. The potential for adverse effects from not using prescribed fire as a forest management tool.

Our next concern involves biological information in the DEIR relevant to the environmental setting and impacts analysis. In general, DFG believes the habitat and vegetation descriptions, and the exotic invasive species and sensitive plant species lists for the JSDF are too general and not, in many instances, regionally appropriate, complete, or accurate. These shortcomings, as addressed in greater detail below, suggest guesswork on the part of CDF and provide an inaccurate assessment of existing botanical conditions and project-related impacts. DFG recommends that CDF utilize field verification or sampling approach to generate the information needed to provide a more accurate description and assessment in the DEIR of sensitive habitat and vegetation types, invasive exotic plants, potential sensitive plants and their habitats, and the potential significant adverse impacts of forest management activities on such species and habitats.

Finally, DFG is concerned that the DEIR contains very little site-specific information regarding plants, and that the existing analysis is both inconsistent and takes a piecemeal approach to analyze the project-related environmental impacts. With respect to plants overall, we believe the DEIR is vague and too general on sensitive plant assessment, surveying, and mitigation measures. We also found the document unclear as to what sensitive plant species had been or will be fully addressed under CEQA (specifically section 15380, subdivisions (c) and (d), of the CEQA Guidelines), and are concerned with the portrayal of the Native Plant Protection Act in the DEIR. The DEIR, for example, provides little or no data or maps and incorrect data (see below) on the known sensitive plant species on JSDF; the document is inconsistent with CDF's own policy regarding sensitive plant assessment and surveys; the document does not indicate or identify any proposed monitoring and inventory efforts to supplement the existing data gap; and the document appears to lack management activities designed to mitigate or avoid potentially significant impacts on such species or their habitat. Against this backdrop, the conclusion in the DEIR that implementation of the proposed project will not result in any potentially significant impacts on sensitive plants are not adequately supported by the document. At a minimum, a database, inventory, and monitoring program is necessary to develop a biologically sound basis for assessing sensitive plant presence, distributions, habitat needs, response to habitat alteration, and species trends as well as to accurately assess and conclude that proposed management activities will not significantly impact a sensitive plant.

July 12, 2002

Mr. Chris Rowney 3

#### Impacts and Mitigation

Page 4. There are omissions regarding potential impacts:

- 5 (1) 6a. The harvest of old-growth forest may have significant adverse effects on wildlife habitat. We believe it may also have significant impacts to wildlife. This may be better addressed in 6c.
- (2) 6b. Continued timber harvesting may adversely affect water quality. We believe that harvesting may adversely affect the aquatic habitats, species, and communities.
- (73) 6c. Timber harvesting may affect additional wildlife species that are not listed as threatened or endangered but meet criteria under California Environmental Quality Act (CEQA). See §15380(d) of the CEQA guidelines.
- Page 20, <u>Environmental Issues Raised</u>. Rewrite "Protection of native fish... within riparian corridors" as "Protection of riparian corridors." Riparian corridors include more than the aquatic component, i.e., habitat for terrestrial species.
- Page 28, Objective 3-2. Define "recovery habitat." Does this term mean habitat that will lead to the recovery of a listed species?
- Page 28, Objective 4-4. The addition of large wood debris (LWD) to anadromous salmonid streams may require a 1601 Streambed Alteration Agreement from DFG. We also recommend that CDF consult with the National Marine Fisheries Service (NMFS) for streams with listed anadromous fishes.
- Page 28, Objective 4-7. The specific location of conifer stands to be cultivated should be mapped. Intensive conifer management could constitute a significant adverse impact to these sensitive resources since old growth stands and marbled murrelet habitat occur in the eastern part of the project area.
- Page 29, Objective 5-1. Include "and that minimizes or avoids impacts to sensitive plants and animals and their habitat."
  - Page 29, Objective 5-3. Recreation corridors should be mapped to show known locations of sensitive resources to ensure that impacts to sensitive resources do not occur. The DEIR should discuss potential significant recreational impacts that could occur. For example, off-highway vehicular use would have a greater noise impact than hiking.

#### ALTERNATIVES, SECTION VI

13

14

Pages 69-70, Table 6. Existing old-growth groves should have a buffer around them. The inner part of the buffer should be managed to attain old-growth characteristics and to mitigate potential loss of the existing old-growth grove. Some groves are quite small (<15 acres) and are vulnerable to significant loss, and therefore, require a larger buffer.



Mr. Chris Rowney 4 July 12, 2002

Page 71, Table 6. There are inconsistencies in the protection strategy described for the northern goshawk and the Cooper's hawk. There are no Forest Practice Rules (FPRs) specifically for the Cooper's hawk. The FPRs for the goshawk are not the same as stated in the first part of this protection strategy.

Page 71, Table 6. The protection strategy as written for Vaux's swift and purple martin give the impression that snags will not be left in uneven-age management areas. There is a need to retain snags in uneven-aged as well as even-aged management areas.

#### RESOURCE SPECIFIC ANALYSIS, SECTION VII

#### Botanical Resources, Section 6-2

- Page 134, <u>Invasive Species</u>. This section should include a discussion of potential control and eradication. Stands and isolated occurrences of these invasive exotics should be delineated on a map in the DEIR. Information presented in Appendix 8 could be combined here.
- ₹ Page 136. Gorse should be targeted for eradication since it is not yet dominant.

#### Hardwoods

21

23

Page 172. The DEIR states that hardwoods over 36 inches DBH will be considered for retention. We agree that the larger size class hardwoods should be retained, and, in the absence of trees over 36 inches DBH, the largest size classes shall be retained. However, the language "considered for retention" provides no guarantee that the largest hardwoods, or those with the greatest wildlife values, shall be retained. The DEIR should set a minimum retention standard, based on each vegetation type, that will ensure that a representative number of hardwoods from all age classes shall be retained. The retention plan should further state which species will be given preference for retention. We recommend preference be given to all madrone, chinquapin and true oak species.

Page 91. The DEIR calls for the retention of all 'native' hardwoods in Class I and II Watercouse and Lake Protection Zones (WLPZs) (except where species imbalance has occurred). Class I and II WLPZs cover 16% of JDSF. The proposed retention of 10-15% of hardwood basal area will result in under-representation of hardwoods upslope of the WLPZ. Revise the hardwood retention plan to assure hardwood retention in both the WLPZ and upslope areas.

#### **Snags**

The DEIR proposes that 1 (30 inch DBH) snag per acre will be retained on JDSF in most areas, and 3 snags per acre (one 30-inch DBH and two 20-inch DBH) in the Special Concern Areas (SCAs). Page 33 outlines the approximately 23 "areas of special concern" (17,000 acres), where harvest will be restricted or prohibited. These

5

July 12, 2002

&

include pygmy forest, cypress forest, WLPZs, Mendocino Woodlands Special Treatment Area, old-growth groves, research areas and unstable slopes. Class I and II WLPZs cover 46% (7,753 acres) of the SCAs. This would result in an unbalanced role of snag retention with most snag retention occurring within the WLPZ. Please assure that 1 snag per acre be retained upslope of the WLPZ.

24

Page 153. The DEIR states that 43% of the current snag density is composed of hardwoods. Implementation of the proposed hardwood retention plan will likely result in a lower contribution of hardwoods to total snag density and recruitment. The DEIR should describe how snag recruitment and retention will be accomplished.

25

Page 273. The mitigation measure proposed states that the Draft Forest Management Plan (DFMP) will be revised to retain *all* snags in all harvest units unless they pose a threat to safety or are within the alignment of roads, until proposed snag densities can be met. We agree with this mitigation measure. However where snags density goals are not met, retention should be a priority.

#### Vegetation Communities and Habitats

a۱.

Page 128. The wetlands discussion should also address swamps (tree dominated wetlands, such as on alluvial redwood floodplains) and pygmy forests (which in most cases are federal jurisdictional wetlands). The wetland nature of pygmy forests should also be addressed in the *Wetland Section* (page 211).

#### Pygmy Cypress Series

27

Page 132. The DEIR should address the high number of sensitive plants and the common wetland designation of this vegetation type. The JSDF contains approximately 613 acres of pygmy forest representing 30 percent of this forest type found anywhere. This occurrence represents is a significant portion of a highly restricted and sensitive vegetation type. The DEIR should address how JDSF will protect this rare and sensitive forest type.

#### **Microsites**

28

Page 134. The DEIR cites "seeps in the Forest may support running-pine (Lycopodium clavatum)". It should also be noted that other microsites such as mesic forest semi-openings more commonly support this species. The document states that "Forest openings may provide habitat for early colonizing species such as the rare maple-leaved checkerbloom (Sidalcea malachroides) or the invasive Scotch broom (Cytisus scoparius)". It should also be noted that this microsite commonly supports the endangered Humboldt milkvetch (Astragalus agnicidus).

6

July 12, 2002

#### Invasive Exotic Species

Page 134. One other California Exotic Pest Plant Council (CalEPPC) List A-1 invasive exotic species, English ivy (*Hedera helix*) is known to occur in this region and should be addressed. English ivy is a serious forest pest (especially riparian areas) where it kills the forest understory and the trees in the overstory and forms "ivy deserts".

Page 134. The displacement of endangered and sensitive plants by invasive exotic species is an important issue that should be addressed, examples of sensitive plants that could be displaced include forest openings associated plants such as Humboldt milk-vetch (Astragalus agnicidus), Bolander's reed grass (Calamagrostis bolanderi), and maple-leaved checkerbloom (Sidalcea malachroides).

Page 136. The DEIR cites that it is unknown whether Himalayan blackberry (*Rubus discolor*) occurs in JSDF. DFG Environmental Scientist Ms. Clare Golec has information that it does occur.

#### Threatened, Endangered, and Sensitive Species

Page 137, Table 14. The following species are cited in the DEIR as potentially occurring on JDSF but we question the likelihood that they occur:

Arenaria paludicola "marsh sandwort" (a misidentification for Mendocino Co.)

Castilleja mendocinensis "Mendocino coast Indian paintbrush" (immediate coast)

Horkelia marinensis "Point Reyes horkelia" (immediate coast)

Navarretia leucocephala ssp. bakeri "Baker's navarretia" (more inland areas)

Phacelia insularis var. continentis "North Coast phacelia" (immediate coast)

Page 137, Table 14. The following species do likely occur on JDSF and should be addressed for potential significant adverse impacts in the DEIR:

Boschniakia hookeri "small groundcone" (recent detection in coastal forest in Men. Co.)

Glyceria grandis "American manna grass" (associated with forested riparian and wetlands)

Usnea longissima "long-beard lichen" (lichen)

Page 138. The DEIR cites "Although the California Native Plant Society (CNPS) is considered an authority on rare plants in California, and maintains an exhaustive database of rare, threatened, endangered and uncommon plants, they are a private organization operating independently of DFG and USFWS. CNPS listed rare plants have not been through a formal public review process to qualify as listed or candidate species under the federal or State ESA." It should also be noted that the CNPS has a formal review process that involves a scientific advisory committee composed of noted academic, professional and amateur botanists across the state. The scientific advisory committee reviews and compiles rare, endangered, threatened, and uncommon plant lists based on the best available data. CNPS places plants on their rare, endangered, or threatened lists (CNPS list 1A, 1B, and 2) to provide the factual basis for a fair argument that the plant meets the definition of rare, endangered, or threatened plant

7

July 12, 2002

under Section 15380(d) of CEQA (California Licensed Foresters Association (CLFA) Plants Workshop March 1, 2001).

Page 138, Table 15. Two CNPS list 4 species are State listed rare or endangered plants that should have been included in Table 14 initially but actually have low probability of occurring, these being:

Calamagrostis foliosa "leafy reed grass" (Kings Range to the north)
Silene campanulata ssp. campanulata "Red Mountain catchfly" (more inland/commonly serpentine)

Page 138, Table 15. This table should also include the CNPS list 3 plants (plants about 30 which we need more information, a review list), which have potential for occurrence, such as *Erigeron biolettii* "streamside daisy".

Page 138, Table 15. The species listed below are cited in the DEIR as, "may potentially occur on JSDF", but are actually questionable/unlikely. This list reflects all the uncommon species of Mendocino County and should be further assessed for those species with potential occurrence on JSDF, or cited as an overall species list for Mendocino County:

Angelica lucida "sea-watch" (immediate coast)

Antirrhinum virga "tall snapdragon" (more inland/serpentine)

Asclepias solanoana "serpentine milkweed" (more inland/serpentine)

Astragalus breweri "serpentine milkweed" (commonly serpentine/volcanic)

Calystegia collina ssp. oxyphylla "Mt. Saint Helena morning-glory" (more inland/commonly serpentine)

Clarkia gracilis ssp. tracyi "Tracy's clarkia" (more inland)

Cypripedium californicum "California lady's-slipper" (usually serpentine wetlands)

Eriogonum strictum var. greenei "Greene's buckwheat" (more inland/usually serpentine)
Eriogonum umbellatum var. bahiiforme "bay buckwheat" (not associated w/coastal
forest habitats/often serpentine)

Eschscholzia hypecoides "San Benito poppy" (not associated w/coastal forest habitats/usually serpentine)

Gilia sinistra ssp. pinnatisecta "pinnate-leaved gilia" (more inland/commonly serpentine or volcanic)

Glehnia littoralis ssp. leiocarpa "American glehnia" (coastal dunes)

Hackelia amethystine "amethyst stickseed" (not associated w/coastal forest habitats/>1,500m)

Linanthus rattanii "Rattan's linanthus" (not associated w/coastal forest habitats/>1,700m)

Lomatium engelmannii "Engelmann's Iomatium" (more inland/>1,150m/serpentine)

Melica spectabilis "purple onion grass" (not associated w/coastal forest habitats/>1,200m)

Mimulus nudatus "bare monkeyflower" (more inland/serpentine seeps)

Navarretia cotulifolia "cotula navarretia" (not associated w/coastal forest habitats/more inland)

57

11

July 12, 2002

and reasonably foreseeable indirect impacts on such species or their habitat are per se significant under CEQA, the distinction between listed an unlisted species is artificially narrow for purposes of impacts assessment and mitigation of project-related impacts. (See, e.g., CEQA Guidelines, §15065, subd. (a); Mountain Lion Foundation, supra, 16 Cal.4th at p. 124 (in holding a categorical exemption inapplicable for purposes of a "delisting" decision under CESA, the court invokes CEQA Guidelines section 15065, subdivision (a), and implies that the mandatory findings control whenever a project creates the "potential for population reduction or habitat restriction"). Finally, the same point is underscored by a letter to Mr. Neil Fischer from Mr. William Snyder, Deputy Chief of Forest Practice for the Northern Region Headquarters of CDF, dated July 19, 2001. The letter, states "Without an adequate scoping procedure, identification of suitable habitat for 15380 (d) species which may be on the plan, confirmation of species presence or absence, and appropriate mitigation measures, the Director will not have sufficient information in the plan to conclude that the plan would substantially lessen the adverse impacts on the environment." The DEIR should be revised accordingly.

Page 144, <u>Listed Species</u>. "JDSF will evaluate the potential for individual land management actions to have a significant impact on listed (rare, threatened, or endangered) species. In those cases where that impact may be significant, appropriate survey and mitigation measures will be implemented." Significance of impacts on a sensitive plant is difficult to accurately predict without surveys in rare plant habitat to determine presence and distribution in relation to the project impacts. Unlike common vegetation components, sensitive plants are generally highly scattered and clumped; therefore any level of impacts focused on a sensitive plant population may result in direct impacts to the species, which potentially could be significant. The letter cited above also states: "Surveys are not a requirement; but unless the presence or absence is established, the available range of mitigations which would meet the requirements of 14 CCR 15370 would generally be limited to avoidance of suitable habitat."

Page 145, <u>California Forest Practice Rules</u>. FPR Sections 919.4, 931.4 and 959.4 should also be discussed. These sections state where significant adverse impacts to non-listed species are identified, the Registered Professional Forester (RPF) and Director shall incorporate feasible practices to reduce impacts as described in 14 CCR 898.

Page 146, Impacts. The following two statements "Impacts to botanical resources are determined by assessing the potential type, level, and frequency of DFMP activities affecting the resource and predicting the response" and "An intensive inventory of the botanical resources has not been conducted on JDSF" raise the question and concern of how the level of impacts to and response of sensitive plant resources can be predicted without an understanding of their presence and distribution within JSDF.

Pages 146 and 147, <u>Impact 3 and 4</u>. The DEIR needs to identify the species discussed throughout the sections.

III-32

\\svr01\pubs\2002\002002\rpt\FEIR\FEIR 9-25-02\Section III Agency Responses.doc



Mr. Chris Rowney 12 July 12, 2002

Page 148, <u>Mitigation and Monitoring</u>. This is an improvised section that does not even address the cited topic of monitoring

Page 149, Table 16, Alt C. D and E. "The impacts of the alternatives are effectively equal with incorporation of the protection measures provided in the DFMP. The DFMP does have a higher degree of project activity proposed than any of the other options. For this reason, there is a higher probability of impacting rare plants. However, the DFMP, with the proposed protection measures, will reduce the level of impacts to below significant" (emphasis added). Adequate sensitive plant consideration and survey guidelines as well as specific mitigations/protection measures have not been proposed and are very general in nature, as well as inconsistent. Therefore, without sufficient information in the DEIR one cannot conclude that the DFMP would substantially lessen the adverse impacts on the sensitive plants to a less than significance level.

#### Wildlife and Wildlife Habitat, Section 6.6

- Page 227, Mammals. It appears that no evaluations were made to determine if any of the four bat species that were listed in the document actually occurred on JDSF and were, therefore, not further considered. Lack of information regarding bat presence on JSDF should not lead CDF to conclude that there are no potential adverse impacts to those species. Providing such information is part of the EIR process.
- Page 227, <u>Birds</u>. The American peregrine falcon was delisted from FESA by the U.S. Fish and Wildlife Service on August 25, 1999.
- Pages 230-259, <u>Species Accounts</u>. There is no discussion on any of the species as to what management activities would benefit each species, how the DFMP plans to manage for the species, and what the goal of the species specific management would be. Such information should be included in the DEIR discussions.
- For several species (e.g., northern goshawk, bald eagle, osprey) there is a fair to a large amount of suitable habitat on the JDSF there is no explanation as to why these animals do not occur there.
- Page, 246, <u>Marbled Murrelet</u>, fourth paragraph. The last two sentences of the paragraph have typographical errors or words missing and are confusing.
- Page 247, Marbled Murrelet, last paragraph. The statement that Table 3 contains a partial summary of murrelet surveys is inconsistent with Table B of Appendix 8E which does not mention that it is an incomplete list.
- Page 249, Northern Spotted Owl, first paragraph. The recovery plan for the northern spotted owl is a draft plan and therefore does not have the status of a "Recovery Plan" as referenced in this paragraph.



13

July 12, 2002

Page 249, last paragraph. This paragraph should also say that of the 40% of northern spotted owls in California that are in the California Coastal Province, a very high percentage of them are on private lands. Some State and federal parks, some small BLM parcels, and Jackson Demonstration State Forest represent the public ownership that supports northern spotted owls.

Page 250, Northern Spotted Owl, first paragraph. There is much better current information available on the numbers and distribution of owls than is presented here. The same source that provides CDF with the Spotted Owl Database that the Board requires RPFs to use in doing timber harvest plans can provide that data.

Page 252, Northern Spotted Owl, third paragraph. CDF records identify 9 spotted owl sites on the JDSF. The text states that there are 14 active sites but there is no year given. The year should be provided, or the statement should be phrased, "There are 13 active sites in 2001. From 1995 through 2001, pairs were found at 12 sites and singles at three in at least one year; no owls were found at three sites. There were records of young being produced in at least one year at nine of the 12 sites where pairs were found." Please also see comments for Appendix 8E – Table D below.

Page 252. CDF has not noted its responsibility regarding the maintenance of spotted owl sites outside of JDSF. There are another 14 activity centers within 0.7 miles of the JDSF boundary.

Page 254. The DEIR states that the purple martin has not been recorded within JDSF. DFG identified a purple martin on JDSF on 7/12/01. A sighting record was sent to CNDDB.

Page 256, California Red Tree Vole, first paragraph. In the first sentence the California red tree vole's range is given, in part, as "in Oregon." This does not seen to be the case as discussed in: M.L. Johnson and S.B. George, 1991. Species limits within the *Arborimus longicaudus* species-complex (Mammalia:Rodentia) with a description of a new species from California. Contrib. in Sci. (Nat. Hist. Mus of Los Angeles Co.) 429:1-16.

Page 259, <u>Pacific Fisher, first paragraph</u>. The last sentence says that late-successional forest defines fisher habitat on the JDSF after a discussion of the necessity of certain habitat elements. It is unclear whether late-successional forest on JDSF is fisher habitat currently or could be some time in the future.

2 Page 260. How will cumulative impacts be evaluated and monitored?

Page 260. Let readers know that eight of the 20 species addressed are covered by FPR, CESA, and FESA. Species accounts should be more detailed to show how the DFMP will provide for the other species (e.g., what are the management actions that will provide habitat for the Vaux's swift, red-tree vole, and foothill yellow-legged frog).

14

July 12, 2002

- Page 262, <u>Large Woody Debris</u> (LWD). The density of LWD should be greater in WLPZs than upslope. However, the DEIR does not define a minimum amount for non-WLPZ or upslope areas. This could result in upland areas without enough LWD for species that depend upon this habitat element.
- >> Page 262, <u>Raptors</u>. Will the spotted owl studies continue or will work only occur to assess project impacts?
- Page 263, <u>Marbled Murrelets</u>. Will survey and monitoring for marbled murrelets continue as part of the DFMP? We recommend that CDF consult with DFG when developing THPs and surveys.
- Page 263, Lotis Blue Butterfly. DFMP needs to identify the protocols (i.e., title, author, and date) as they are not generally known.
- Page 263, <u>Thresholds of Significance</u>. There is no mention that cumulative impacts will be evaluated for thresholds of significance.
- Page 264, <u>Habitat Modification Impacts</u>. The DEIR should mention local reductions in wildlife populations, and identify the most common significant impact when determining cumulative impacts of habitat modifications.
- Page 269, <u>Marbled Murrelet</u>. All old-growth groves should have buffers and there should be a stated mechanism to grow future old-growth groves and individual old-growth trees throughout JDSF.

#### Appendix 8D-1

- >> The rationale for selection of species in this appendix should be stated.
- Table 8D-3. Use this table in the body of the document and include all other sensitive species listed in Tables 14 and 15.
- Appendix 8E, Table B. The table is a list of surveys conducted from 1992 to 2002, and is incorrectly stated as from 1993 to 2001.
- Appendix 8E, Table D. This table is not consistent with the DFG's Spotted Owl Database. It appears that the database provided by the DFG to CDF for RPF's use in reviewing THPs was not consulted to find current information. If that source had been checked and inconsistencies noted, then there should have been communication with the DFG Database Manager to see why inconsistencies existed.

We hope or comments have provided you with a constructive review of your document. If you have any questions, please contact Dr. Marty Berbach at 916-327-8839 or e-mail <a href="mailto:mberbach@dfg.ca.gov">mberbach@dfg.ca.gov</a>.



15

July 12, 2002

cc: Department of Fish and Game

Native Anadromous Fish and Watershed Branch

Gail Newton Marty Berbach Kevin Shaffer

Habitat Conservation and Planning Branch

Sam Blankenship Gordon Gould Mary Ann Showers

Central Coast Region Carl Wilcox Tracie Hughes Brad Valentine Christina Fabula Clare Golec Richard Macedo

## State Department of Fish and Game Letter LW-119

STATE OF CALIFORNIA THE RESOURCES AGENCY

GRAY DAVIS, Governor

R1

#### DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246 Sacramento, CA 94244-2460 Website: www.fire.ca.gov (916) 653-7772



**September 11, 2002** 

Larry Week, Chief Native Anadromous Fish and Watershed Branch Department of Fish and Game 1807 13th Street, Suite 104 Sacramento, CA 95814

Re: Responses to Department of Fish and Game's July 11, 2002 comments on Draft EIR to the Jackson Demonstration State Forest Draft Management Plan (SCH #2000032002)

Dear Mr. Week:

Thank you for your comments on the Jackson Demonstration State Forest (JDSF) Draft Environmental Impact Report (DEIR). Our responses follow below. Please note that the "Response numbers" correspond with the comment numbers as assigned in Exhibit Letter #119, a copy of which is attached.

A number of the comments in your July 11, 2002 letter address the proposed management provisions set forth in the Jackson Demonstration State Draft Forest Management Plan (DFMP), and do not directly apply to the content of the DEIR. The DEIR analyzes the environmental impacts of the DFMP, and addresses or dismisses from consideration several alternatives to the proposed management provisions. This analysis describes why specific management provisions preferred by the Department of Fish and Game are not incorporated or advanced in the draft plan. While some might be noted or briefly addressed in the responses below, those comments regarding content of the DFMP and not the DEIR are generally beyond the scope of required responses as mandated by the California Environmental Quality Act (CEQA).

As the Lead Agency, the Department of Forestry and Fire Protection (CDF) is provided under CEQA the authority to determine "threshold of significance" for impacts on environmental resources based upon qualitative or quantitative standards. CEQA presumes that compliance with existing regulatory standards results in less than significant impacts to resources. Section 15064.7, Subdivision (h), of the CEQA Guidelines, provides that the Lead Agency shall "rely on the vast body of regulatory standards" that have already undergone rigorous public agency review in determining thresholds of significant impacts. Said

Subdivision (h), however, also establishes flexibility for the Lead Agency to establish whether existing regulatory standards are sufficient to protect an environmental resource from any potentially significant impact that may result from the proposed project.

The basis for the Lead Agency's determination of whether a standard applies in a particular case must be based on "substantial evidence in the record that [the] standard is inappropriate to determine the significance of an effect. The Lead Agency is not required to base their determination of applicable standards on information presented by project opponents that a standard is or is not appropriate or effective to protect a resource.

Specific responses follow.

## **Response to Comment #1**

DFG's September 4, 2001 comments were provided to CDF during the scoping process for the Draft Forest Management Plan (DFMP). As such, these comments apply directly to the DFMP and indirectly to the Draft EIR (DEIR). As scoping comments to the DFMP, CDF used the comments in the development of the project alternatives that were analyzed as part of the DEIR. A response to the individual comments has been prepared and is included as an attachment.

## Response to Comment #2

Burning of landing piles or other limited burning for hazard reduction or site preparation related to Timber Harvesting Plans (THPs) may occur. A program that would use "prescribed fire" as a management tool outside of approved THPs has not been developed for JDSF. The DFMP does not propose the use of prescribed fire on a wide scale basis. The DFMP proposes that consideration be given to conducting research into the use of prescribed fire as a management tool, and indicates that this may be done in the Mendocino Woodlands Special Treatment Area, in the Parlin Fork Management Unit, or as part of vegetation management studies. The DFMP does indicate that construction of shaded fuel breaks may be considered in the future. Development of shaded fuel breaks that include the commercial harvest of trees would be subject to the THP review process. Shaded fuel breaks not subject to the THP review process would be subject to all the standards and mitigations of the Forest Management Plan and EIR. If a shaded fuel break project were found to be outside the scope of the Program EIR, the project would be subject to additional CEQA review.

Fire protection and suppression efforts in response to a wildfire are considered an emergency project and are exempt from the requirements of CEQA (Guidelines §15269). Analysis of the potential effects of not using fire as a management tool is addressed in general in the no project alternative where no active forest management would occur.

The habitat and vegetation descriptions provided in the DEIR were based on information available through database and literature searches and personal communications with knowledgeable professionals. The general descriptions are not meant to be specific to a particular location within JDSF, but represent the Forest in general. They are meant to give public agency decision makers and members of the general public an idea of what general habitat and vegetation characteristics exist in the JDSF. Regarding the sensitive plant species lists, the lists (and known occurrences vs. potential to occur) will be updated in response to DFG comments (see responses to comments on sensitive species, below).

In addition, this EIR document is a "program EIR." A program EIR may be prepared for an agency program or series of actions that can be characterized as one large project in connection with a plan or general criteria that govern the conduct of a continuing program. Once a program EIR has been prepared, subsequent actives or projects within the program need to be evaluated to determine if additional CEQA documentation needs to be prepared. A program EIR allows a lead agency to examine the overall effects of a proposed program. In practice, the general nature of the programs being evaluated result in program EIR s that are typically more conceptual and abstract than a project EIR and may contain a more general discussion of impacts, alternatives and mitigation measures.

## Response to Comment #4

This comment includes several topics related to botanical issues, the nature of the proposed project and the nature of a program EIR, all of which are addressed in this one response. As mentioned previously, the lists of sensitive plant species known to occur and potentially occur at the JDSF will be updated in the EIR in response to DFG comments. Additionally, because this is a program EIR, specific locations of sensitive species that would be important on a project basis are not necessarily required at the program EIR level. Stating which sensitive plant species are known to occur at the JDSF and which have the potential to occur should provide sufficient information to determine what sensitive plant species need to be addressed for future projects. Finally, the list of known and potential sensitive species provided in the EIR should not be considered concrete but rather should be utilized as an adaptive management tool that will likely change over time as sensitive species are added to or subtracted from available sensitive species lists. Please refer to the portions of the DEIR that deal with incorporating changes to sensitive species lists.

page 138, Any listing status additions or changes should be reflected in the DFMP.

page 27, Goal #3 (objective 3-3) Determine which native species, in addition to listed species, are most susceptible to adverse impacts from land management activities and which, therefore, warrant extra concern.

page 29, Goal # 6 (objective 6-3) Initiate an adaptive management process for all phases of State Forest planning and plan implementation. Monitor forest operations and make modifications as necessary to achieve management goals.

The scoping and survey efforts required on a project basis are specified in the DFMP and the DEIR. Surveys will be completed on a project-by-project basis as indicated by the results of the scoping process, using the procedure outlined by CDF Director Tuttle [1999] for RPFs during species assessments for THPs. Surveys for sensitive plant species will be based on current DFG survey Guidelines (DFG 2000). Monitoring, in the context of CEQA, relates to mitigation monitoring and is addressed in CEQA guidelines section 15097. Monitoring in the context of the DFMP and in general in the EIR is much broader and includes monitoring of environmental conditions as well as project activities and mitigation monitoring. Monitoring is an integral component of the goals and objectives listed in the DEIR. Please refer to the following portions of the DEIR that either directly incorporate monitoring or imply that it is necessary for implementing the following goals and objectives.

page 26 and 27, Goal #1

- (Objective 1-2) Conduct monitoring of resource management activities to gauge their effectiveness in meeting project objectives.
- (Objective 1-3) Demonstrate the compatibilities and conflicts involved in multiple use of forestland, and investigate methods to mitigate conflicts.
- (Objective 1-7) Consult and cooperate with universities and colleges, the U.S. Forest Service, and other public and private researchers in conducting research and demonstration projects. Enter into cooperative agreements for investigations of mutual interest. Make the State Forest available to educational institutions and other agencies for research and demonstration projects.

page 28, Goal #3

• (Objective 3-6) Monitor the development and condition of terrestrial and aquatic habitats over time, and apply adaptive management principles to ensure that goals are met.

page 28, Goal #4

• (Objective 4-6) Minimize the influence of exotic plants and animals.

page 29, Goal #6

- (Objective 6-1) Collect, process, interpret, analyze, update, store, index, and make retrievable the array of information and data about the State Forest and its resources needed to support Forest planning and management.
- (Objective 6-2) Prepare, monitor and update State Forest Management Plans and program area plans.

page 30, Goal #7

(Objective 7-1) Preserve native plant species and limit the invasion and spread of exotics.
 Protect native communities from insect, disease, and plant pests using the concept of integrated pest management.

The DFMP includes program and policy level management activities designed to avoid or mitigate significant environmental impacts to sensitive plants. Site-specific activities to avoid or mitigate potentially significant impacts will be designed and implemented on a project-by-project basis. Please refer to the following portions of the DEIR for statements relating to mitigation and avoidance of impacts to sensitive plant species and their habitats.



## page 143 of DEIR, Plant Species of Concern

 JDSF will provide site- and species-specific protection measures that contribute to maintenance or improvement of long-term conservation of population viability of these plant species. ('These plant species' refers to the known species of concern listed on page 143 of the DEIR.)

## page 143 of DEIR, Habitat Protection

• Management activities will be altered if necessary, including avoidance of plant populations, to prevent significant negative effects to habitat.

page 144 of DEIR, Guidelines for Species Surveys and Avoidance of Significant Impacts; *Listed Species* 

- In those cases where that impact may be significant, appropriate survey and mitigation measures will be implemented.
- Unlisted species mitigation will vary according to identified need, the current state of species knowledge, and through consideration of DFG input developed through the scoping process.

## page 145 of DEIR, Mitigation Development

 Upon determination that a proposed action is likely to result in a significant adverse effect, mitigation measures proposed to substantially lessen or avoid the impact will be included in project-associated documentation. Mitigation measures will be developed with consideration of input provided by CDFG.

## page 146 of DEIR, Impact 3

 Management activities will be altered (including avoidance of the plant population) if necessary to prevent significant negative effects.

As indicated in the DEIR, the proposed project-by-project scoping for potential sensitive plant species (listed and unlisted), sensitive plant species surveys where indicated by scoping, and avoidance and/or mitigation for sensitive plants and their habitat associated with each project are adequate conditions to determine that future projects will not result in significant impacts to sensitive plants and their habitat (page 147, Impact 4 of the DEIR). Clarification of projects that would be subject to scoping, surveying, and avoidance/mitigation for sensitive plants is found on page 146 of the DEIR, second paragraph under Impact 3: "Management activities that result in ground and/or vegetation disturbance would be subject to rare plant surveys. This includes, but is not limited to, timber harvest and timber stand improvement practices, road maintenance programs, prescribed fire, installation of shaded fuel breaks, campground maintenance or expansion, trail development, herbicide application, and IWM activities."

A database would be very useful for tracking and monitoring sensitive plant occurrences across the JDSF. Although a database was not specifically mentioned in the DEIR, tracking biological data is a specific objective of JDSF. Please refer to page 29 of the DEIR, Goal #6, objective 6-1: Collect, process, interpret, analyze, update, store, index, and make retrievable the array of information and data about the State Forest and its resources needed to support Forest planning and management. Also refer to page 39 of the DFMP, Data and Information Management section: "JDSF is currently building a state-of-the-art information system to integrate all survey data on the Forest into a data base management system, the State Forest Data Bank. Future resource data will be integrated using a common format. The enhanced access to data will benefit managers, researchers and the public."

The subheading numbered 6a on page 4 will be changed to read:

"The harvest of old-growth forest may have significant effects on wildlife or wildlife habitat."

The subheading numbered 6c on page 5 will be changed to read:

"Timber harvesting may have adverse affects on wildlife or wildlife habitats that are listed as threatened or endangered."

## Response to Comment #6

This comment pertains to the executive summary portion of the DEIR. Please refer to Biological section of the DEIR for a complete discussion on aquatic species, habitats, and communities.

## **Response to Comment #7**

This comment pertains to the executive summary portion of the DEIR. Please refer to DEIR page 225 for a complete discussion on the selection of animal species considered for inclusion in the EIR. The animals considered are consistent with the CEQA Guidelines, Section 15380.

## Response to Comment #8

This list represents general issues raised during the scoping process. Issues regarding wildlife habitat are indicated in other statements included in the list.

## Response to Comment #9

In this context, recovery habitat would mean functional habitat for listed species. Due to the limited size of JDSF, the range of most listed species and the variety of factors affecting listed species recovery, it is unlikely any of the proposed management activities of JDSF will lead directly to the recovery of a listed species. However, specific management to create or allow the natural development of habitats for listed species may aid their recovery.

#### Response to Comment #10

As indicated in the DEIR (page 119), the appropriate agencies will be contacted prior to projects involving the placement of LWD in watercourses.

#### Response to Comment #11

This comment is directed towards the goals and objectives of JDSF. This general objective works toward the goal of forest restoration. Specific locations of stands to be cultivated or developed to provide higher conifer percentages will be known at the project level, which then can be mapped. Adequate protection to affected resources will be provided at the project level to avoid significant adverse impacts.

#### **Response to Comment #12**

The intent of the proposed additional language is included in the goal and objectives for Watershed and Ecological Processes.

#### **Response to Comment #13**

With the exception of the 300-foot buffers around the existing campgrounds, the exact location of additional recreation corridors is not currently known, and therefore un-mappable. The existing campground buffers are shown on Figure H.



This comment references the portion of Table 6 on DEIR page 69 and 70 concerning the summary of protection measures for the Marbled Murrelet, and suggests that all old growth groves should have a buffer around them. A discussion of the life history, occurrence and habitat requirements for the species starts on DEIR page 245. A discussion of potential impacts to marbled murrelets from the proposed action begins on DEIR page 26. The DEIR indicates that the combination of habitat protection, species surveys in potential habitat, and consultation to determine the appropriate protection for occupied habitat should it occur, as presented in the DFMP will be sufficient to protect the marbled murrelet.

As discussed in the DFMP and the DEIR, the proposed action does not propose to remove old growth groves, old growth aggregations or a significant number of residual old growth trees out side of groves or aggregations. Three of the groves or grove complexes will specifically be provided with late seral augmentation areas designed to promote the development of contiguous blocks of late seral forest around or adjacent to the groves. These groves were selected, primarily because of their size and the condition of the adjacent forest, as having the most potential to provide relatively large areas of interior-forest habitat when augmented by surrounding late-seral management areas. The majority of old growth groves are adjacent to areas designated for uneven-aged management or are adjacent to protected riparian areas. Some groves or grove complexes are adjacent to Highway 20 or private timberlands, or share a small amount of perimeter with an even-aged management area. The late seral augmentation areas, riparian zones, surrounding uneven management, surveys of potential marbled murrelet habitat on a project basis, and specific protection to the majority of residual old growth trees is an increase in protection from the current levels and will not result in a significant impact to the old growth resource.

#### **Response to Comment #15**

Although the Forest Practice Rules give no specific protection strategy for the Cooper's hawk, where significant adverse impacts to non-listed species are identified, the RPF and Director shall incorporate feasible practices to reduce impacts as described in 14 CCR §898 (Forest Practice Rules §919.4.). In addition, the Fish and Game Code provides specific protections to nest sites for raptors. For more information regarding minimizing significant impacts to non-listed species, see Tuttle (1999). The protection strategy for nesting northern goshawk under the preferred alternative exceeds the standards of the Forest Practice Rules. According to the Forest Practice Rules [(919.3 (b)(4)] for the northern goshawk, the buffer zone shall be a minimum of five acres in size and up to a maximum of 20 acres when explained and justified in writing by the Director. The DFMP provides occupied goshawk nest sites with a 100-acre protection zone and a 300-acre post-fledging zone.

#### **Response to Comment #16**

Snags will also be retained in the uneven-aged management areas. In the DFMP (page 62), snag retention standards apply throughout the Forest, regardless of the silvicultural systems being applied. For more information, please see the following in the DEIR: page 75, Table 6, Section 6.6.5 (Project Impacts); and Section 6.6.6 (Mitigation and Monitoring).

Potential control and eradication of invasive exotic plants is addressed on EIR page 142-143.

## Response to Comment #18

As indicated in the EIR text, invasive exotics such as pampas grass are typically widespread in JDSF. In cases where there is limited distribution, such as gorse or eucalyptus, the general location of the occurrence is provided in the text.

## Response to Comment #19

Appendix 8 contains only information related to native plant species, and does not include the introduced plant species.

#### Response to Comment #20 and #42

The integrated weed management (IWM) plan presented in the Forest Management Plan and EIR promotes working cooperatively with other agencies, landowners, and organizations to develop weed management strategies. A treatment strategy for gorse, and the prioritization of treatment areas and the types of actions that will be developed, will likely be included as part of the integrated weed management process.

### Response to Comment #21 and #22

Hardwood retention standards contained in the DFMP were analyzed in the DEIR and determined to not result in a significant adverse impact to wildlife. Larger size class hardwoods (>36" DBH) are to be retained (except where safety issues exist, or removal is required such as in a road right-of-way), throughout the Forest. Naturally occurring hardwoods are to be retained in the WLPZs, and throughout special concern areas when consistent with objectives of that area. With current hardwood species distribution throughout JDSF, the retention standards of the Plan and sprouting characteristics of hardwoods, it was determined that no significant adverse effects related to hardwood species would occur from implementation of the Plan.

#### **Response to Comment #22**

See Response to Comment #21.

## Response to Comment #23

Please see Section 6.6.6. "Mitigation and Monitoring."

## Response to Comment #24

The desired future condition for the Forest described in the Plan (page 62) includes 3 snags per acre in all wildlife special concern areas, and one snag per acre over 30 inches DBH for the entire Forest distributed in both riparian and hill slope areas. Snag retention and recruitment measures are included in the DFMP with additional mitigation provided in the DEIR on page 273 to provide for this desired condition. As desired future conditions also includes increasing the conifer component in the eastern portion of the Forest back to natural occurring levels, it is possible the percentage of future snags composed of hardwoods will be reduced from current levels, and an increase in the percentage of conifer snags will occur. Analysis of this possible reduction of the percentage of hardwood snags related to conifer snags resulted in no significant adverse effects to snag dependant species will likely occur.



Although the retention of snags will be a priority, especially where snag densities are low, safety and road alignments are also priorities. The value of each snag will depend on its size, species, characteristics, etc. and its retention will have to be weighed against other feasible options on a case-by-case basis. Overall, the loss of snags due to safety and road alignments is expected to be minimal.

## Response to Comment #26

The wetlands discussion on page 128 of the DEIR provides some examples of wetlands and was not meant to be inclusive of all types of wetlands. However, modifying the paragraph to incorporate the two additions for the final EIR will not significantly alter the purpose of the EIR, so they can be incorporated. In the final EIR, the following sentence will be added to the paragraph that reviews wetlands:

"Swamps, (tree-dominated areas, such as on portions of alluvial redwood floodplains) and pygmy forests, can also constitute as wetlands, depending on site conditions."

In the same respect, the Wetlands section (p. 210/211, section 6.5.1 Setting, second paragraph) of the DEIR will have the following sentence added:

"It is likely that some poorly drained areas in the pygmy forest also meet wetland criteria."

This sentence is a direct quote from p. 15 of the DFMP's Wetlands section.

## Response to Comment #27

The suggested additions (in the first comment sentence) incorporate ideas that increase awareness of the sensitive nature of the pygmy cypress series. Therefore, the following will be added to (what is currently page 132 of the DEIR) the final EIR under the <a href="Pygmy Cypress Series">Pygmy Cypress Series</a> (these will not require changes to the Management Plan):

- First paragraph (add the following to the end of the first sentence): "...and is a CNPS list 1B species."
- First paragraph (make the following, taken directly from page 14 of the DFMP, the second sentence): "Mendocino pygmy forest, a unique ecological system recognized by the California Natural Diversity Database as a sensitive plant community type, occurs only in coastal Mendocino County.
- First paragraph (change the sentence regarding shrub species to add pygmy manzanita's CNPS list status): "Shrub species are common and can include hairy manzanita (Arctostaphylos columbiana), pygmy manzanita (Arctostaphylos mendocinensis; a CNPS list 1B species)..."
- First paragraph (make the following the last sentence): "The herbaceous layer can also include two CNPS list 1B species, swamp harebell (Campanula californica) and coast lily (Lilium maritimum)."

• Ecological Factors first paragraph (make the following the last sentence): "It is likely that some poorly drained areas in the pygmy forest also meet wetland criteria." As mentioned in response #26, this sentence is a direct quote from page 15 of the DFMP.

Regarding the last sentence of the DFG comment, the DFMP includes program level management direction regarding land management/use activities that may affect the pygmy cypress forests. Site-specific potential impacts and mitigation design will be addressed on a project-by-project basis. Due to the known occurrence of sensitive plant species within this forest type, and due to the likely wetland designation in portions of the pygmy forest, this sensitive habitat type should be addressed for sensitive plant issues and wetland delineation as projects arise. See response #4, above, for a response regarding sensitive plant issues. Wetlands are addressed in the Wetlands section of the DEIR, page 211 and 212, sections 6.5.2, 6.5.3, 6.5.4, and 6.5.5 (Regulatory Framework for the Protection of Wetlands, Project Measures for the Protection of Wetlands, Thresholds of Significance, and Impacts).

Additionally, the DEIR discusses specific management actions relating to pygmy cypress forests as mentioned in the DFMP. Please refer to the following sections in the DEIR and DFMP:

• page 142, DEIR, section 6.2.4 Specific Management Actions, Special Concern Areas and Unique Habitats:

Cypress Groups. Stands dominated by pygmy cypress occurring on unproductive soils outside of true pygmy forests will not be harvested (this is also addressed in Appendix III, page 146 of the DFMP; a note is mentioned in this section that "conifer stands containing cypress that occur on more productive sites may be subject to harvesting and are not included in this Special Concern Area.")

Pygmy Forest. JDSF will maintain the current distribution and species composition of this plant community and protect it from harmful human disturbance, while continuing to allow recreational activities.

• page 28, DEIR, Goal #3

(Objective 3-4) Provide protection to listed species, to species of concern, and to their occupied habitats. Avoid disturbance to uncommon plant communities such as meadows and pygmy forest.

(Objective 3-6) Monitor the development and condition of terrestrial and aquatic habitats over time, and apply adaptive management principles to ensure that goals are met.

page 30, DEIR, Goal #7

(Objective 7-1) Preserve native plant species and limit the invasion and spread of exotics. Protect native communities from insect, disease, and plant pests using the concept of integrated pest management.

page 146 of the DFMP, Appendix III, Pygmy forest

This Special Concern Area includes nearly all of the Jughandle Reserve Special Concern Area, along with other pygmy forest stands in JDSF that occur outside of the Jughandle Reserve boundaries. These areas will not be harvested.

#### Response to Comment #28

Similar to the situation discussed in response #26, above, the discussion regarding microsites provides some examples of microsites and was not meant to be inclusive of all types. Modifying the paragraph to incorporate the two additions for final EIR will not significantly alter the EIR. The following changes will be made (currently page 134 of the DEIR), last paragraph in the Microsites section (these changes will not require changes in the Management Plan):

- (Add the following to the parentheses at the end of the sentence) "(Lycopodium clavatum; additionally, other microsites, such as mesic forest semi-openings, more commonly support this species)."
- (Make the following the last sentence) "Humboldt milk -vetch (Astragalus agnicidus) has recently been discovered by CDF in disturbed forest openings created by timber harvesting and road maintenance. Forest openings, especially with soil disturbance, may provide habitat for this species."

## Response to Comment #29

The following text will be added to the DEIR to address English ivy:

Hedera helix - English ivy. English ivy is a shiny-leaved, woody vine belonging to the ginseng family (Araliaceae). Palmately lobed leaves are borne on juvenile stems, while those on mature stems are generally entire. Native to Eurasia, this plant was introduced to North America by early European settlers (Hickman, 1993). English ivy is usually first established in a disturbed site, then aggressively spreads to the surrounding forest by vegetative growth as well as by seed from its black berries. There are no natural controls for English ivy. The vines grow along the ground engulfing and smothering all shrubs, grasses, and forbs by its overgrowth. The vines attach to trunks of larger shrubs and trees by aerial rootlets, and continue to grow upwards reaching for sunlight. The woody vines encircle tree trunks, inhibiting tree growth and vigor. The ivy vines also spread over the branches and foliage of the tree canopy. Native plant life becomes smothered and dies beneath the dense growth of English ivy. Such habitats are commonly alluded to as "ivy deserts."

English ivy is known to occur in the region; and is a serious forest pest (especially in riparian areas) where it can out-compete, overgrow, and kill the understory plants, as well as the trees of the forest canopy.

The first sentence of the Invasive Exotic Species section addresses this issue. The sentence states that occurrence of invasive exotic species can cause negative impacts to native species and impact plant diversity.

## **Response to Comment #31**

Text of the EIR will be revised to state:

Rubus discolor – Himalayan blackberry. Himalayan blackberry is a robust, evergreen, arched bramble in the rose family (Rosaceae). Its brambles can grow to 3 meters tall (Munz and Keck 1959). Stems are 5-angled, 5 to 15 mm in diameter, and contain many prickles (Hickman 1993). Leaves are compound (often with five leaflets but sometimes three), sharply toothed, and white below. Inflorescences are many-flowered panicles of white to pink flowers. Fruits are shiny black drupelets clustered in an oblong shape (Hickman 1993, Munz and Keck 1959).

Plants inhabit a variety of disturbed habitats at less than 1,600 meters in elevation and are native to Eurasia (Hickman 1993). Apparently, they are favored by rats for food and shelter. Himalayan blackberry is known to occur in some areas of the Forest (CDFG, comments on DEIR, 2002). This species has the potential to spread primarily to areas that are near existing concentrations and where openings are maintained for a sustained period of time.

## Response to Comment #32

Table 14 represents sensitive plant species that have the potential to occur on JDSF. Due to the goal of JDSF to practice adaptive management (see page 29 of the DEIR, Goal #6: (objective 6-3) Initiate an adaptive management process for all phases of State Forest planning and plan implementation. Monitor forest operations and make modifications as necessary to achieve management goals.), Table 14 will likely change over time as changes to sensitive species source lists occur and more becomes known about each sensitive species. The Forest Practice Rules and the scoping, survey, and mitigation process described in the DEIR provide for consideration of species that are not currently on Table 14, so addition and removal of sensitive species to and from Table 14 should not affect protection of sensitive species. After reviewing DFG's comments and available habitat information, CDF concurs that the above-mentioned species should be removed from Table 14. Table 14 of the final EIR will have the following species removed based on best available current knowledge of the species range and likely habitat: Arenaria paludicola "marsh sandwort," Castilleja mendocinensis "Mendocino coast Indian paintbrush," Horkelia marinensis "Point Reyes horkelia," Navarretia leucocephala ssp. bakeri "Baker's navarretia," and Phacelia insularis var. continentis "North Coast phacelia." Removing Castilleja mendocinensis "Mendocino coast Indian paintbrush" and Horkelia marinensis "Point Reves horkelia," will require removal of these species from the DFMP list of potential species of concern that may occur in areas of suitable habitat (currently listed under the first bulleted list under Plant and Animal Species of Concern Possibly Present on JDSF on page 68 of the DFMP).

The Decision and Rationale column of Appendix 8D-3 will also need to be changed for the above species to reflect their removal from Table 14. The following changes will be made in the Decision and Rationale column of Appendix 8D-3 in the final EIR:

(Make the following change for Arenaria paludicola) "Unlikely (misidentification for Mendocino Co., according to DFG comments for the DEIR)"

(Make the following change for *Horkelia marinensis*) "Unlikely (coastal dunes, coastal prairie, coastal scrub/sandy)"

(Make the following change for Navarretia leucocephala ssp. bakeri) "Watch for (meadows, valley and foothill grassland)

(Make the following change for *Phacelia insularis* var. *continentis*) "Unlikely (coastal bluff scrub, coastal dunes, sandy soils, and bluffs)

Note that no change is needed for the Decision and Rationale for excluding *Castilleja mendocinensis* from Table 14; this species is already listed as "unlikely." To be thorough, the scoping process for any future project should include referencing Tables 14 and 15 of the final EIR, Appendix 8D-3, available database information from the CNPS Inventory and California Natural Diversity Database, and any other sources of sensitive plant habitat and occurrence data.

## Response to Comment #33

As mentioned in response #31 above, addition and removal of sensitive species to and from Table 14 should not affect protection of sensitive species because the scoping, survey, and mitigation process should allow for inclusion of species that are not on Table 14 as well as those that are. Although the above three species did not result from a query of the CNPS Inventory, based on habitat requirements and information presented by DFG in the comment, it is reasonable to add these species to Table 14 of the EIR. The title of Table 14 will be revised so that the lichen can also be included, and it will be reworded as "SPECIAL STATUS PLANT AND LICHEN SPECIES WITH POTENTIAL OCCURRENCES WITHIN JDSF." Table 14 of the final EIR will be revised to include the following (with the following inserted alphabetically):

Boschniakia hookeri "small groundcone," CNPS list 2, RED 3-1-1, State None, Federal None.

Glyceria grandis "American manna grass," CNPS list 2, RED 3-1-1, State None, Federal None.

Usnea longissima "long-beard lichen," CNPS None, RED None, State None, Federal None.

An extra sentence should be inserted in the final EIR just after Table 14 that discusses the ranking that qualifies this lichen to be considered sensitive. The sentence in the final EIR will state:

"Usnea longissima is considered a sensitive lichen due to a Global Rank of G3 (21-100 element occurrences OR 3,000-10,000 individuals OR 10,000-50,000 acres) and a State Rank of S2.1 (6-20 element occurrences OR 1,000-3,000 individuals OR 2,000-10,000 acres; very threatened) as

listed in DFG's Special Vascular Plants, Bryophytes, and Lichens List (Natural Diversity Database July 2002)."

Species descriptions (presented separately from this response letter) will be written for the above three species and included in Appendix 8D-1 of the final EIR. These species will also be included in Appendix 8D-3 of the final EIR with the following text:

**Boschniakia hookeri** "small groundcone," CNPS list 2, RED 3-1-1, State None, Federal None, Decision and Rationale: Likely (recent detection in coastal forest in Mendocino Co. according to DFG).

Glyceria grandis "American manna grass," CNPS list 2, RED 3-1-1, State None, Federal None, Decision and Rationale: Likely (forested riparian areas and wetlands)

Usnea longissima "long-beard lichen," CNPS None, RED None, State None, Federal None, Decision and Rationale: Known (recent detection on JDSF by DFG)

As *Usnea longissima* is now known to occur on JDSF, this should be reflected in the list of known species of concern in the Management Plan. See response #43, below, for text to insert into the Management Plan regarding the known presence of this sensitive lichen.

## Response to Comment #34

Adding a portion of the suggested text to the final EIR would not significantly alter the intent of the EIR and would clarify potential concerns as to how the CNPS lists are compiled and why they should be incorporated into the scoping process. It is therefore appropriate to add text for clarification to the final EIR. The following text will be added to the final EIR after last sentence of the paragraph currently shown on page 138 of the DEIR and will read:

"The CNPS lists are developed through a formal review process involving a scientific advisory committee composed of noted academic, professional, and amateur botanists across the state. The scientific advisory committee reviews the best available data to compile rare, endangered, threatened, and uncommon plant lists. CDFG currently accepts the premise that placement of plants on CNPS lists 1A, 1B and 2 provides a fair argument that they qualify as rare, endangered or threatened under Section 15380(d) of CEQA (CDFG, comments on DEIR, 2002)."

## **Response to Comment #35**

Because the above-mentioned species have a low probability of occurring on the JDSF, they will not be added to Table 14 of the DEIR as recommended in DFG's comments. Table 14 will be maintained as a list of sensitive plant and lichen species that are likely to occur on the JDSF.

#### **Response to Comment #36**

Adding CNPS list 3 species to Table 15 would not significantly alter the intent of the EIR. It is appropriate to add CNPS list 3 species to the table and change the title of the table to reflect the additions. Monitoring List 3 occurrences will assist in future determination of whether these species should be listed as rare, threatened, endangered, or uncommon, or whether the species should be rejected from CNPS listing. The CNPS list 3 species that will be incorporated into

Table 15 are obtained from Appendix 8D-3 and include species that are known from the JDSF project USGS 7.5' quadrangles and adjacent quadrangles. The following will be added to Table 15 in the final EIR (added in alphabetical order):

- Cardamine pachystigma var. dissectifolia, Common Name: dissected-leaved toothwort, Family: Brassicaceae.
- *Hemizonia congesta ssp. leucocephala*, Common Name: Hayfield tarplant, Family: Asteraceae.

The title of Table 15 will be changed in the final EIR to read:

## "Table 15 CNPS List 3 and 4 species that may potentially occur within JDSF"

No other CNPS list 3 species, except the above two, resulted from the query of the CNPS inventory for the project and adjacent quadrangles. However, DFG indicates that the following additional list three plant specie has the potential to occur on JDSF (Pers. Com CDFG September 3, 2002):

• Erigeron biolettii, common name: streamside daisy.

Other list 3 species may also potentially occur on the JDSF based on habitat requirements. Sensitive plant species that are not listed in Table 14 or 15 but that have the potential to occur on JDSF will be addressed through the adaptive nature of the proposed scoping, survey, and mitigation process with input from DFG.

With the addition of List 3 species to Table 15, it is appropriate to add text to the paragraph before Table 15 to incorporate List 3 species into the scoping process. The paragraph before Table 15 (page 138 of the DEIR) will have the following change in the final EIR (make this change to the fifth sentence in the paragraph):

"In addition, species that are listed by CNPS as plants about which we need more information (List 3) and plants of limited distribution (List 4) should be considered during scoping, although the intensity of any survey efforts, assessment of potential impacts, and development of mitigations will recognize that List 3 and 4 species do not have the same legal and sensitivity status as species listed in Table 14."

#### Response to Comment #37

As with Table 14, Table 15 should contain species that are likely to occur on the JDSF and exclude species that are not likely to occur. Table 15 of the final EIR will have the following species removed: "Angelica lucida, Antirrhinum virga, Asclepias solanoana, Astragalus breweri, Calystegia collina ssp. oxyphylla, Clarkia gracilis ssp. tracyi, Cypripedium californicum, Eriogonum strictum var. greenei, Eriogonum umbellatum var. bahiiforme, Eschscholzia hypecoides, Gilia sinistra ssp. pinnatisecta, Glehnia littoralis ssp. leiocarpa, Hackelia amethystine, Linanthus rattanii, Lomatium engelmannii, Melica spectabilis, Mimulus nudatus, Navarretia cotulifolia, Navarretia subuligera,

Orobanche valida ssp. howellii, Silene campanulata ssp. campanulata, Stellaria littoralis, Streptanthus barbiger, Streptanthus drepanoides."

As mentioned in response to comment 36, above, sensitive plant species that are not listed in Table 14 or 15 but that have the potential to occur on JDSF will be addressed through the adaptive nature of the proposed scoping, survey, and mitigation process with input from DFG.

## **Response to Comment #38**

It is true that North Coast semaphore grass is a state listed rare plant and candidate for endangered listing and that it should be added to the paragraph on page 139 of the DEIR that discusses federal and state-listed species. (Note that semaphore grass is included in the plant list on page 69 of the DFMP.) In the final EIR, the second sentence of that paragraph (page 139 of the DEIR) will be changed to read:

"Five additional plant species are considered by the State of California to be endangered or rare."

Also, the following sentence will become the last sentence in that paragraph in the final EIR:

"North Coast semaphore grass (Pleuropogon hooverianus) is a state listed rare species and is a candidate for state listed endangered."

#### **Response to Comment #39**

Incorporating statements to clarify the relationship between CDF, DFG, JDSF, and the NPPA is reasonable. The following will be added after what is currently the last sentence in the NPPA paragraph for the final EIR:

"Other management activities may not be exempted from Fish and Game Code Section 1911 (Fish and Game Code Section 1913). Regardless of the exemption allowed to THPs under Fish and Game Code Section 1913, it is the stated intent of JDSF to address sensitive plants and their habitats on a project basis through scoping in consultation with DFG, surveys according to appropriate survey guidelines where indicated by the results of scoping, assessment of potential impacts, and avoidance or mitigation to reduce impacts to a level less than significant."

#### Response to Comment #40

Incorporating statements to clarify what constitutes a rare, threatened, or endangered species under CEQA is reasonable. The following will be inserted after the second sentence in the CEQA paragraph for the final EIR (page 140 in the DEIR):

CEQA Guidelines Section 15380(b) provides the criteria for Endangered, Rare and Threatened species. Section 15380(d) states that species that are not on state or federal lists, but that meet the criteria in subsection (b) of Section 15380, "shall nevertheless be considered to be endangered, rare, or threatened." CNPS List 1A, 1B, and 2 plant species will be initially presumed to meet these criteria, subject to review and reassessment during scoping. Additionally, under Section 15380, a species will be considered Endangered, Rare or Threatened if it is listed as such under the California or Federal Endangered Species Act and species designated as candidates for listing by the Fish and Game Commission under the CESA are also "presumed to be endangered, rare or threatened." The California ESA presumes that candidate species meet the criteria for listing as Endangered, Rare, or Threatened.

"Harmful human disturbance" refers to adverse impacts to the integrity and natural condition of the pygmy forest resulting from CDF's management actions or from public activities over which CDF has control. Further clarification is found on page 146 of the DEIR, second paragraph under Impact 3: "Management activities that result in ground and/or vegetation disturbance ...includes, but is not limited to, timber harvest and timber stand improvement practices, road maintenance programs, prescribed fire, installation of shaded fuel breaks, campground maintenance or expansion, trail development, herbicide application and IWM activities." Disturbance that may result from illegal activities does occur on JDSF (as mentioned on page 402 of the DEIR, third paragraph of the Recreation Activities section: "Though prohibited by State law (CCR Chapter 9, Subchapter 1, Section 1431), substantial off-road motor vehicle usage occurs. Most of this use is related to access from rural residential neighborhoods.").

Management and recreation activities that will continue are not considered to be "harmful human disturbance." Management activities include road maintenance, control of exotic pest plants, fire protection, trash abatement, and trail maintenance. Recreation activities include hiking, bicycle riding, and horseback riding on established roads and trails. The DFMP does not propose and CDF does not anticipate development of new roads, trails or campgrounds in the pygmy forest.

As mentioned on page 142, Specific Management Actions section, of the DEIR, "In general, the DFMP provides for the protection of special vegetation types, such as old-growth and pygmy forest or wetlands, through restricting activities in these communities and by utilizing an Integrated Weed Management approach to prevent spread of exotics into special communities." See previous responses for a discussion of protection goals and objectives for protecting pygmy forests and for a discussion on the need for input from a qualified botanist prior to management activities in pygmy forests. Protection measures to avoid impacts associated with illegal activities is addressed in a general sense on page 30 of the DEIR, Goal # 7, objective 7-3: "Maintain a physical presence in the Forest to enforce forest and fire laws. Make regular contact with forest users to ensure understanding of and compliance with regulations and use limitations. Use public contact as an opportunity to deliver forest management education messages."

Response to Comment #42 See Response to Comment #20.

#### Response to Comment #43

It is appropriate to incorporate the five referenced species into the final EIR under the list of Plant Species of Concern (page 143 of the DEIR), add the scientific names to all of the species of concern, and change the title of the list so that the lichen may be added. In the final EIR and Management Plan, the Plant Species of Concern list (page 143 of the DEIR) will have the new title of "*Plant and Lichen Species of Concern*," and the list will be changed as presented below:

- Arctostaphylos mendocinoensis, "pygmy manzanita"
- Astragalus agnicidus, "Humboldt milk-vetch"
- Calamagrostis bolanderi, "Bolander's reed grass"
- Campanula californica, "swamp harebell"
- Carex californica, "California sedge"



- Cupressus goveniana ssp. pigmaea, "pygmy cypress"
- Lilium maritimum, "coast lily"
- Lycopodium clavatum, "running-pine"
- Mitella caulescens, "leafy-stemmed mitrewort"
- Pinus contorta ssp. bolanderi, "Bolander's pine"
- Usnea longissima, "long-beard lichen"

Additionally, Appendix 8D-3 of the final EIR will be changed for the *Mitella caulescens* row to reflect that this species is known to occur on JDSF. The Decision and Rationale column for the *Mitella caulescens* row will be changed in the final EIR to state "*Known*." No similar changes are needed for Appendix 8D-3 as the remaining four species added to the newly-revised *Plant and Lichen Species of Concern* list are already listed as "*Known*" in this Appendix.

## Response to Comment #44

CDF understands that the Department of Fish and Game would like to see people conduct full floristic surveys when checking for the presence of threatened, endangered, or rare plants. The full floristic surveys would identify and list all plant species found on the site. Benefits from these surveys would include demonstrating the expertise of the surveyor and the methodology used in the survey and adding to the general body of information about the distribution of plant species.

Despite these potential benefits, CDF declines to require full floristic surveys as a method for checking for the presence of threatened, endangered, or rare plants in the area of proposed projects on JDSF. A full floristic survey would be more costly and time consuming than a survey for a limited list of threatened, endangered, or rare species that would be focused on the kinds of habitat where the species could be found. Where the surveyors are trained to recognize the targeted plants, CDF believes that the surveys would be more efficient in terms of time, cost, and usefulness of the information in helping to determine whether the proposed project might have a significant effect on the environment. CDF would expect to work with the Department of Fish and Game to help assure CDF that the training for the surveyors would be adequate for them to recognize the targeted plants.

It is appropriate to develop survey guidelines to be used when the scoping process indicates that botanical surveys are appropriate. The DFG has issued *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Plant Communities* (DFG 2000) to provide recommendations and guidance in regards to rare plant survey strategies. These recommended guidelines provide a starting place for designing survey procedures that are most appropriate for assessing the potential impacts of different kinds of management activities on JDSF. To incorporate survey guidelines into the EIR and FMP, the following will be added to the final EIR under the Species Protection section (currently pages 143 and 144 of the DEIR): "Survey designs will be based on the concepts contained in the DFG Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Plant Communities (DFG 2000). Surveys conducted as part of THP development will follow the practices commonly accepted by CDF and CDFG for THP review. Surveys for other types of projects will recognize the specific features of those projects. (For example, road surface maintenance and roadside brushing are ongoing activities that create

repeated periodic disturbances, precommercial thinning typically occurs a few years following the more substantial disturbance of a commercial harvest, and shaded fuel break construction targets ground cover vegetation.)."

The following changes will be made to the second-to-last and last sentences in the same paragraph regarding Species Protection (page 144 of the DEIR), and an additional sentence will be added to clarify who should manage and conduct botanical surveys: "Survey results will be made a part of the project's environmental assessment documentation. Observations of rare, threatened or endangered plants or plant communities will be recorded on Field Survey Forms and copies provided to CDFG. JDSF will provide for, on an as-needed basis, a sensitive plant identification-training program to enhance the knowledge of field personnel who may encounter sensitive plant resources. Personnel who will be responsible for botanical surveys and those conducting the survey(s) will be capable of identifying the listed species for which the survey is conducted."

Regarding discussion of botanical surveys for rare, threatened and endangered plant species, it is appropriate to maintain consistent language throughout the EIR. To clarify and maintain consistent language regarding the need for pre-project botanical assessment, in the final EIR, the phrase "As resources allow" will be removed from the first sentence of the last paragraph in the Plant Species of Concern Possibly Present on JDSF section (page 144 of the DEIR). This will not significantly alter the intent of the EIR. The stated phrase is also part of a sentence under the "Plant and Animal Species of Concern Possibly Present on JDSF" section in the Management Plan (page 68 of the DFMP) that is presented for a variety of sensitive plant and animal species. It is appropriate to leave the phrase intact in the Management Plan while removing the phrase in the portion of the EIR that discusses pre-project assessments for sensitive plant species.

#### **Response to Comment #45**

Due to the limited distribution of pygmy manzanita, pygmy cypress, and Bolander's pine, all of which are CNPS list 1B species, and because the lotis blue butterfly is not currently known to occur at the JDSF, the most effective management practice regarding these sensitive plants and this sensitive wildlife resource is to avoid removal of the proposed sensitive plant species. While JDSF is interested in "...habitat restoration and management for species that may or may not presently occur on the forest (page 59, second paragraph in the Wildlife and Ecological Processes section of the DFMP)," removal of these species would not guarantee that the host plant would necessarily grow and thrive in their place, nor does this guarantee that the lotis blue butterfly would eventually be found at JDSF. The only guarantee would be that these sensitive plant species would further decline in number. To address this issue, the paragraph regarding Habitat Management Practices (page 144 of the DEIR) will be changed to read:

"Limited removal of species in the pygmy cypress forest may occur as a result of habitat development projects for the lotis blue butterfly. Prior to habitat development projects, rare plant surveys will be conducted according to accepted survey guidelines (see previous section) to address sensitive plant resources.

A qualified botanist will assess the appropriateness of removal of any sensitive plant species in relationship to fostering habitat for the growth of the butterfly's host species, Lotus formosissimus. Effectiveness monitoring will be conducted for any habitat management practice involving removal of plant species in the pygmy forest to assess the response of the forest to habitat alteration."

The Habitat Management Practices section of the Management Plan (page 63 of the DFMP) will also have the above changes.

## Response to Comment #46

The "Plant Species of Concern Possibly Present on JDSF" list is a direct copy of the list presented in the DFMP. It is appropriate to update this list in both the EIR and the Management Plan to incorporate only those species that will be listed in Table 14 of the final EIR to maintain consistency throughout the documents. See previous responses and compare these species additions and removals with Table 14 of the DEIR to determine what the final EIR Table 14 will include and what species will be listed under the "Plant Species of Concern Possibly Present on JDSF" in the Management Plan. In the final Management Plan list, it is appropriate to present scientific names in addition to common names.

#### Response to Comment #47 and #48

Please refer to the response to comment 40 to address the first two issues in the DFG comments regarding what constitutes a rare, threatened, or endangered species.

It is reasonable for species that meet the definition of a rare, threatened, or endangered plant under Section 15380 of the CEQA Guidelines to be addressed during scoping, surveying, and development of avoidance and/or mitigation measures, regardless of their formal listing status.

To clarify the treatment of (rare, threatened, and endangered) unlisted species, the first sentence in the Guidelines for Species Surveys and Avoidance of Significant Impacts section (page 144 of the DEIR) of the final EIR will be changed to read: "The DFMP includes guidelines for pre-project scoping, surveying, and mitigation development. These guidelines are included below. Rare, threatened and endangered species, as defined by Section 15380 of the CEQA Guidelines, will be addressed during the scoping, surveying, and mitigation-development processes. For species that do not meet the Section 15380 definitions of a rare, threatened, or endangered species but that are CNPS list 3 or 4 species, evaluation, scoping and mitigation practices are likely to vary according to identified need, the current state of species knowledge, and consideration of input provided by CDFG through the scoping process.

The bulleted sections titled "Listed Species" and "Unlisted Species" on page 144 of the DEIR (under the Guidelines for Species Surveys and Avoidance of Significant Impacts section) will be removed to maintain consistency and clarity in which species will be addressed. The sentence at the end of the "Listed Species" bullet that states "An assessment area that extends beyond the boundaries of the planned activity may also be required for some species, will become part of the Survey section (page 145) of the final EIR.

The above-recommended change will require a change in the Guidelines for Species Surveys and Avoidance of Significant Impacts section (page 69) of the DFMP. See response to comment 53, below, for text that incorporates the above issues.

Response to Comment #48 See response #47.



Potential impacts to sensitive plants will be avoided or minimized on a project-by-project basis. This will be addressed through the proposed scoping, survey, and mitigation development process discussed in previous responses. Please refer to the response to comment 39 that adds text to the NPPA paragraph of the EIR (page 140 of the DEIR) to clarify the above. Also refer to the response to comment 44 that clarifies that the current DFG survey guidelines (DFG 2000) will be used as a basis for developing project specific survey strategies.

## Response to Comment #50

It is reasonable to incorporate the sections of the California Forest Practice Rules that pertain to non-listed species. The paragraph under the California Forest Practice Rules (page 145 of the DEIR) will have the following sentence become the second to last sentence in the paragraph in the final EIR: "The Forest Practice Rules state that "Where significant adverse impacts to non-listed species are identified, the RPF and Director shall incorporate feasible practices to reduce impacts as described in 14 CCR §898." (14 CCR §919.4)."

#### **Response to Comment #51**

The potential for the proposed management activities to result in impacts to sensitive plant resources has been addressed on a program basis. The EIR analysis determined that there are sensitive plant resources known to occur within JDSF, and there is the potential for additional sensitive plant resources to occur. It was further determined that ground or vegetation disturbing projects as proposed in the DFMP have the potential to impact sensitive plant resources if the project location overlaps or is adjacent to the location of sensitive plant resource. It was further determined that potential impacts to sensitive plants would be avoided or minimized on a project-by-project basis by the establishment and implementation of the sensitive plant resources protection program presented in the DFMP. The program has been further refined by mitigations developed through the EIR process. As mentioned in response to comment 4, above, the proposed project-by-project scoping for potential sensitive plant species, surveys for rare, threatened or endangered plant resources (discussed in response to comment 44), and avoidance and/or mitigation for sensitive plants and their habitat potentially impacted by each project (also see response to comment 50) are adequate conditions to determine that future projects will not result in significant adverse impacts to sensitive plants. Also refer to the last sentence in the Impact 3 section (page 147 of the DEIR) that states "The scoping process as described in the DFMP is broad enough to address the need to consider surveys for non-listed sensitive plant species included in Table 14 and 15 but not listed as potentially occurring on the Forest in the DFMP, and to address additions or deletions of plant species from sensitive species lists."

It is reasonable to clarify the above and reflect the specification that currently accepted survey guidelines should be used in the Impacts introductory paragraph (page 146 of the DEIR). The last two sentences in the Impacts introductory paragraph (currently on page 146 of the DEIR) will be changed in the final EIR to read: "An intensive inventory of the botanical resources has not been conducted on JDSF; inventory information will be accumulated over time on a project-by-project basis through species and habitat surveys that are indicated by scoping. Potential impacts to botanical resources will be avoided at the project implementation level through scoping, consultation with DFG, surveys where appropriate as determined during scoping, and development of measures that avoid impacts to sensitive plant species or reduce them to a level less than significant." The above changes do not appear to require changes to the Management Plan (except those changes that have already been proposed in previous responses).

The Impact 3 and 4 sections (page 146 and 147 of the DEIR) provide quantification of species that show great affinity to the pygmy forest or SCAs, which species show Mendocino County as the end of their range, and which are known from only this county. To clarify, the number of species in each category will be removed. The fourth sentence in the first paragraph at the top of page 147 of the DEIR that discusses sensitive species that are protected by default of habitat preference will be changed in the final EIR to read: "Some sensitive plant species, such as pygmy manzanita, show a great affinity to the pygmy forest, while others, such as swamp harebell, can be found in both pygmy forests and less site-specific habitats." The remaining sentences in this same paragraph will be changed to read: "The restrictions on activities in WLPZs will provide a measure of protection to some species that are generally restricted to riparian areas or wetlands, such as livid sedge. Some species, such as coast fawn-lily and running-pine, are forest generalists and would not necessarily be protected by WLPZ SCAs."

In the first paragraph in the Impact 4 section on page 147 of the DEIR, the second sentence will be changed in the final EIR to read: "Some species, such as Humboldt milk-vetch, that occur or have the potential to occur on the JDSF are at the end of their range in Mendocino County, and some, including pygmy manzanita and pygmy cypress, are only known from Mendocino County."

Finally, the Impact 3 and 4 sections (page 146 and 147 of the DEIR) are not specific as to which sensitive plant species will be addressed during the scoping, survey, and mitigation development processes. Response to comment 47 should clarify which species (i.e., all species that meet the definitions of rare, threatened and endangered in Section 15380 of the CEQA Guidelines) are addressed under these sections. The last paragraph of the Impact 4 section (page 147 of the DEIR) will be changed in the final EIR to state the following: As discussed above, JDSF has committed to completing a scoping and assessment process, including rare plant surveys as necessary, on a management activity or project basis to determine if the management activity or project has the potential to significantly impact a rare, threatened, or endangered species. JDSF has also committed to developing mitigation measures to avoid significant adverse impacts to endangered, rare, or threatened plants and plant communities if they are identified."

#### **Response to Comment #52**

The Mitigation and Monitoring section (page 148 of the DEIR) will have the last sentence of the currently shown paragraph removed and the following ten mitigations will be added after the introductory paragraph. Clarifications on CEQA-mandated mitigation monitoring will be added to the same section following the mitigations (see below).

In the final EIR, the Mitigation and Monitoring section (page 148 of the DEIR) will have the following additions and/or changes:

Mitigation 1. The Plant Species of Concern list (page 62 of the DFMP) will have the title changed to read "*Plant and Lichen Species of Concern*," and the list will be changed as presented below:

- Arctostaphylos mendocinoensis, "pygmy manzanita"
- Astragalus agnicidus, "Humboldt milk-vetch"
- Calamagrostis bolanderi, "Bolander's reed grass"
- Campanula californica, "swamp harebell"



- Carex californica, "California sedge"
- Cupressus goveniana ssp. pigmaea, "pygmy cypress"
- Lilium maritimum, "coast lily"
- Lycopodium clavatum, "running-pine"
- Mitella caulescens, "leafy-stemmed mitrewort"
- Pinus contorta ssp. bolanderi, "Bolander's pine"
- Usnea longissima, "long-beard lichen"

Mitigation 2. Under the Species Protection section (page 62 of the DFMP), the following will be added to become the first bullet:

• The pre-project scoping process will include referencing Tables 14 and 15 of the final EIR, Appendix 8D-1 and 8D-3, available database information from the CNPS Inventory and the California Natural Diversity Database, and other reasonably available sources of sensitive plant habitat and occurrence data.

Mitigation 3. Under the Species Protection section (page 62 of the DFMP), the following will be inserted as the second and third bullets:

- JDSF will use the current DFG Guidelines (DFG 2000, DFG Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Plant Communities, included in Appendix 8) as a basis for developing project specific survey strategies.
- Project specific botanical field surveys will be conducted within potential habitat in a
  manner that is likely to locate sensitive plant species identified during scoping as
  being susceptible to significant project impacts.

Mitigation 4. The following two sentences will replace the sentence in the last bullet under the Species Protection section beginning on page 62 of the DFMP:

JDSF will provide for, on an as-needed basis, a sensitive plant identification-training program to enhance the knowledge of field personnel that may encounter sensitive plant resources. Personnel who will be responsible for botanical surveys should meet the recommended qualifications for botanical consultants included in the DFG survey guidelines (DFG 2000). Field surveyors should have a demonstrated ability to identify the RTE species being surveyed for.

Mitigation 5. The paragraph under the Habitat Management Practices section on page 63 of the DFMP will be changed to read:

Limited removal of species in the pygmy cypress forest may occur as a result of habitat development projects for the lotis blue butterfly. Prior to habitat development projects, rare plant surveys will be conducted according to accepted survey guidelines to address sensitive plant resources. A qualified botanist will assess the appropriateness of removal of any sensitive plant species in relationship to fostering habitat for the growth of the butterfly's host species, *Lotus formosissimus*.

Effectiveness monitoring will be conducted for any habitat management practice involving removal of plant species in the pygmy forest to assess the response of the forest to habitat alteration.

Mitigation 6. The first bullet under the Plant and Animal Species of Concern Possibly Present on the JDSF (page 69 of the DFMP) will be changed to read:

• Boschniakia hookeri "small ground cone," Carex arcta "northern clustered sedge," Carex livida "livid sedge," Carex saliniformis "deceiving sedge," Carex viridula var. viridula "green sedge," Erythronium revolutum "coast fawn lily," Fritillaria roderickii "Roderick's fritillary," Glyceria grandis "American manna grass," Juncus supiniformis "hair-leaved rush," Lasthenia macrantha ssp. bakeri "Baker's goldfields," Limnanthes bakeri "Baker's meadowfoam," Pleuropogon hooverianus "North Coast semaphore grass," Rhynchospora alba "white beaked-rush," Sanguisorba officinalis "great burnet," Senecio bolanderi var. bolanderi "seacoast ragwort," Sidalcea calycosa ssp. rhizomata "Point Reyes checkerbloom," Sidalcea malachroides "maple-leaved checkerbloom," Sidalcea malviflora ssp. purpurea "purple-stemmed checkerbloom," Triquetrella californica (N/A), and Viola palustris "marsh violet."

Mitigation 7. The first sentence under the Guidelines for Species Surveys and Avoidance of Significant Impacts section on page 69 of the DFMP will have the following change:

JDSF will evaluate the potential for individual land management actions to have a significant impact on rare, threatened, or endangered species (as defined by Section 15380 of the CEQA Guidelines).

Mitigation 8. The last sentence in the paragraph under the Guidelines for Species Surveys and Avoidance of Significant Impacts section on page 69 of the DFMP will have the following change:

For species identified as sensitive, but that do not meet the definition of rare, threatened, or endangered under the abovementioned section of the CEQA Guidelines, evaluation and mitigation practices are likely to vary according to identified need, the current state of species knowledge, and consideration of input provided by CDFG.

Mitigation 9. The Surveys section on page 69 of the DFMP that falls under the Guidelines for Species Surveys and Avoidance of Significant Impacts section will be changed to the following:

When suitable habitat is present within or immediately adjacent to the project area, project planning documentation will include results of surveys and a discussion of the efforts made to determine presence or absence of the species in question. Avoidance measures and other mitigation determined to be necessary to avoid significant effects will be specified.

Mitigation 10. The first paragraph in the Plant Resources section under the Goal statement on page 106 of the DFMP will have the following change to the second sentence:

A qualified botanist or other trained personnel will conduct surveys within project areas and nearby habitats potentially impacted by the project to assess plant occurrence as necessary to develop measures to avoid significant impacts.

(The following will be added after the ten mitigations listed above).

## **Mitigation Monitoring:**

Timing: As part of project planning and design

Scope: Forest-wide

<u>Implementation Responsibility</u>: the Department <u>Monitoring Responsibility</u>: the Department

#### **Response to Comment #53**

Sensitive plants are adequately addressed with the proposed pre-project scoping process, surveys that will be designed based on DFG survey guidelines (DFG 2000), and mitigation development for sensitive plants. Specific mitigations/protection measures for identified sensitive plant resources will be developed on a project basis. It is reasonable to clarify the text in Table 16 (page 149 of the DEIR that discusses Alternatives C, D, and E) to incorporate the changes made to the EIR and mitigations for the DFMP. The following change will be made to the first sentence in the Discussion box for Alternatives C, D, and E in Table 16 (page 149 of the DEIR) in the final EIR:

"Each of these alternatives would include the same protection measures for endangered, rare, or threatened plant species."

Additionally, the following change will be made to the last sentence in the Discussion box for Alternatives C, D, and E in Table 16 (on page 149 of the DEIR) in the final EIR:

"However, the DFMP, with the proposed scoping, survey, and mitigation-development processes, and the mitigations provided in the final EIR will reduce the level of impacts to less than significant."

## Response to Comment #54

There are actually six bat species listed in the document (see Table 36). These include the yuma myotis, (*Myotis yumanensis*), long-eared myotis (*Myotis evotis*), fringed myotis (*Myotis thysanodes*), long-legged myotis (*Myotis volans*), Pacific (Townsend's) big-eared bat (*Corynorhinus*)



(*Plecotus*) townsendii townsendii), and the pallid bat (*Antrozous pallidus*). All of these bat species were considered for inclusion in the DEIR, as described on pages 225 and 230 of the DEIR, but were excluded from detailed analysis as discussed below:

- At the time of publication, there were no records of the aforementioned bat species occurring on or in the vicinity of JDSF.
- No limestone caves, lava tubes, tunnels, or old mining shafts occur on JDSF, except
  for one old tunnel that is sealed at both ends. There is a large abandoned building
  referred to as the "cat barn" at Camp 20 that is being managed as a "standing ruin"
  and will remain unchanged as part of the FMP.
- The lack of available information regarding the use and value of various aged and structured redwood habitats to the aforementioned bat species does not allow for an accurate analysis of potential impacts.
- The above bat species use a variety of micro-habitats (e.g. under bark, in crevices, caves, buildings, etc.) as roost and maternal sites. The use and value of redwood hollows and snags compared to other micro-habitats, such as hardwoods or the bark of young-growth redwood, is not available.
- Potentially key habitat elements, such as old-growth groves, aggregates, residuals, and snags will be protected as described in the DFMP.
- Watercourses, ponds, and bogs will receive WLPZ protection buffers.
- Management geared towards the advancement of late successional habitat will occur in the WLPZs and Mendocino Woodlands Special Treatment Area.
- Conservation strategies for species such as the marbled murrelet, spotted owl, vaux's swift, and purple martin will also provide key habitats for bats.

Although limited research in unfragmented redwood forests has been completed, the value of small, remnant patches of old growth to bats is unknown (Zielinski and Gellman 1999). More specifically, the use and value of "basal hollows" in old-growth redwood trees compared to other known and available roost and maternal habitats, such as under bark or in crevices, of the aforementioned species is largely unknown. Along the same note, the use of micro-habitats in various aged and structured stands has not been studied in redwood habitats. The available data on such habitats is limited and primarily focuses on bat guano indices (see Gellman and Zielinski 1996 and Zielinski and Gellman 1999), although trapping and species identification was completed in the latter study. There is one study currently in progress that focuses on the use of basal hollows by bats on JDSF. This data is not yet available and, like earlier studies, focuses on bat guano and not specific species. However, incidental observations of bats as a result of this study could provide some idea of the bat species known to use JDSF. According to Thomas and West (1991), bats in southern Washington and coastal Oregon only perceived two classes of forest: old-growth and younger stands, with significantly more bats detected in stands of old-growth. Less than one percent of JDSF is composed of intact oldgrowth forest and, as proposed in the DFMP, no such old-growth stands are proposed to be harvested.

#### **Response to Comment #55**

On DEIR page 227, Table 36, the Federal Regulatory Status of the American Peregrine will be changed to read: "*Federal-SC*." This species was de-listed from the FESA on August 25, 1999, and is now considered a Federal Species of Concern.



The purpose of pages 230-259 is to provide the reader with some general background information regarding the life histories and habitat requirements of the selected species. Additionally, this section provides information regarding known occurrences and potential habitats of the selected species on JDSF. The goal of this section was not to discuss the species-specific management activities and goals of JDSF. This analysis is provided in Section 6.6.5 and Table 38 of the DEIR.

The goals of the species-specific management are two-fold. First, protect known nest sites, aquatic habitats, and key habitat elements, such as snags, old-growth aggregates, and downed wood. Second, provide a diversity of habitats throughout JDSF. This includes managing for late-successional habitat. Specific goals do not include future population targets, but rather focus on providing a variety of habitats for a number of species.

#### Response to Comment #57

No studies have been completed to determine the reasons why these species do not occur or occur in low numbers on JDSF. Therefore, any specific inferences would be speculation. However, based on what we do know regarding these species and JDSF, the following presumptions can be made:

- There have been two sightings of goshawks on JDSF, but no nests have been found. The CWHR does not consider redwood forest as nesting habitat for this species. Furthermore, the highest ranking the CWHR gives redwood is as "low quality" foraging habitat. Please refer to the DEIR for detailed habitat descriptions and discussions regarding this species and JDSF.
- Bald eagles are only known to nest in one location in Mendocino County (CDFG 2002). Therefore the lack of bald eagles on JDSF is, more or less, representative of Mendocino County as a whole. Based on the CWHR, redwood is considered low quality nesting habitat for this species. Furthermore, bald eagles are typically associated with large waters with abundant fish, such as large rivers, lakes, and reservoirs. These factors are probably primarily responsible for the lack of nesting bald eagles on JDSF.
- Nesting ospreys have been reported on JDSF near Casper Creek and are regularly observed on adjacent private timberlands (DEIR).

#### **Response to Comment #58**

Page 246, Marbled Murrelet, fourth paragraph. The last two sentences of this paragraph have been clarified and consolidated and should read:

Of the 44 nest trees reviewed by Hamer and Nelson (1995a) in the Pacific Northwest, 64% were in trees recorded as alive/healthy, 36% as declining, none were in snags, and cover directly over the nests averaged 85%.

DEIR page 247, Marbled Murrelet, last paragraph. The statement in question should reference the DFMP Appendix 8E, Table 3. The header of Table 3 should read:

"Partial summary of marbled murrelet surveys conducted on JDSF between 1993 and 2001."

## Response to Comment #60

The text on DEIR page 249, Northern Spotted Owl first paragraph will be revised to cite: "Draft Recovery Plan"

## **Response to Comment #61**

The following information will be included in the last paragraph of DEIR page 249:

Of the 40% of northern spotted owls in California that are in the California Coastal Province, a very high percentage of them are on private lands. Some State and federal parks, some small BLM parcels, and JDSF represent the public ownership that supports spotted owls.

### **Response to Comment #62**

It is important to note that JDSF has surveyed project areas to avoid "take" as required by law. In addition, an active NSO research project being undertaken on JDSF included a survey of the entire Forest in 2001 and continues to monitor selected sites. The majority of JDSF is potential habitat for NSO. The database included in the DEIR is representative of the general information available for NSO population. The modification of the data would not contribute any important new information relative to the survey and protection needs for the Northern Spotted Owl in JDSF. The information used was the most up to date available specifically for JDSF.

#### Response to Comment #63

Stephens (2002) indicates that there are 14 active sites on JDSF but does not specify the date, although the report is based on data collected in 2001. The author goes on to say that of these, two sites (MD124 and MD258) would likely be determined inactive if surveys continued in the future. A closer review of the data indicates that no owls were detected at MD258 in 2001 and only a single nighttime detection of a male was made at MD124 in spite of intensive survey effort in 2001. Therefore, in 2001 there were actually 13 active sites of which the status of one (MD124) was somewhat questionable.

The sentence "Fourteen active spotted owl territories, consisting of 11 pairs and 3 singles, were recorded (DFMP Appendix V, Table 5)" will be changed to read: "As a result, 13 spotted owl territories, consisting of 11 pairs and 2 singles, were recorded in 2001 (DFMP Appendix V, Table 5)." Table D in the DEIR is correct.

#### **Response to Comment #64**

Spotted owls on and off JDSF shall be considered, addressed, and "take" avoided on a project basis.

A query of the CNDDB (February 4, 2002) for purple martin in Mendocino County was completed in preparation of the DEIR. Another query of the same database was recently completed in response to this comment. The July 12, 2001 occurrence is not available on this version. None the less, the sentence "Although it has not been recorded within JDSF, there are records of purple martin occurring in the vicinity (CNDDB 2002, G-P 1997)" will be changed to read: "The DFG identified a purple martin on JDSF on July 12, 2001 (DFG DEIR comments) and there are additional records of this species occurring in the vicinity (CNDDB 2002, G-P 1997)."

#### Response to Comment #66

The first sentence, paragraph one, page 256 under the California red tree vole will be changed to read:

"The California red tree vole is distributed along the coastal lowlands of northern California to near the Oregon border."

#### **Response to Comment #67**

The last sentence of the first paragraph on page 259 states: "Accordingly, the use of late successional forest to define fisher habitat should be considered conservative." There is no reference to JDSF in this or the preceding paragraphs. Please refer to the third paragraph on page 259 for fisher habitats on JDSF.

## Response to Comment #68 and #74

Cumulative effects are considered primarily on a project related basis because the temporal and spatial relationship of individual projects is speculative at the program level. See also General Response #9.

## Response to Comment #69

This information is provided as part of Table 36 on DEIR page 227. The species accounts section does not discuss management actions of the DFMP (see response to comment 11). Please refer to section 6.6.5 (Project Impacts) for management actions of the DFMP.

## Response to Comment #70

The DFMP specifies the LWD densities that will be averaged over a 160-acre subwatershed area, and that WLPZ and special concern areas will contribute a greater proportion of downed logs. Minimum densities of LWD and minimum sizes are provided in the DFMP. These standards were analyzed in the DEIR and a determination was made that significant adverse environmental impacts would not result from the proposed LWD management standards.

## **Response to Comment #71**

The current spotted owl research project is expected to continue for a few more years, according to the original study plan. After completion of the study, spotted owl surveys are expected to be implemented on an as-needed basis to avoid potential for "take" associated with individual projects.

Surveys for marbled murrelet will be implemented on an as-needed basis to avoid potential for "take" associated with individual projects. Surveys will be conducted according to current protocol.

## Response to Comment #73

No survey protocol currently exists for this species. However, the USFWS will be asked to assist JDSF in developing a protocol for surveying potential lotis blue butterfly habitat in JDSF.

## Response to Comment #74

One of the possible outcomes of the research/demonstration mission of JDSF is to aid in the development of thresholds of significance. From a programmatic perspective the protections identified in the Management Plan and the associated EIR are designed to provide protections necessary for sensitive and listed species. See Response to Comment #68.

## Response to Comment #75

The comment regarding "local reductions in wildlife populations" provides no sense of scale, time frames, or definitions. In addition, little information is available regarding local trends of wildlife populations or the most common significant impacts. The most common significant impact will vary from species to species and from region to region. As an example, significant impacts to neotropical migratory birds could occur in any number of locations on or between their breeding and wintering locations.

#### Response to Comment #76

Refer to response 14 above for a discussion regarding buffers around old growth groves. The issue of old growth protection is discussed at length in the DFMP and the DEIR. Likewise the development of late seral structural characteristics is also discussed at length in the documents.

#### **Response to Comment #77**

The rational for species selection is provided on DEIR pages 224 and 225.

#### **Response to Comment #78**

This table (Table 8D-3) will remain in the appendix as presented to limit the amount of technical information in Volume 1 of the EIR. Appendix 8 is referred to in the second paragraph under the Threatened, Endangered, and Sensitive Species section on page 137 of the DEIR. Because Appendix 8D-3 is referred to, it does not need to be incorporated in the body of the EIR. Additionally, as addressed in Mitigation 2 of response to comment 52, Appendix 8D-3 will be one of the available resources that is referenced during the scoping process for sensitive plant species.

## **Response to Comment #79**

No. Appendix 8E, Table B is correctly identified.

#### Response to Comment #80

A query of the CDF NSO Data Base was requested on January 28, 2002, or thereabout, and received by NRM on February 4, 2002 (Request No. 3303). The results of the query were reviewed and the data found to be only current through 2000. The information used in the



DEIR was based on the most up to date and currently available data that had been collected during property wide NSO surveys completed in 2001 (see Stephens 2002).

If you have questions regarding these comments, please contact Chris Rowney, Resource Management at (916) 653-9420 or e-mail at Chris.Rowney@fire.ca.gov.

Sincerely,

**Ross Johnson Deputy Director Resource Management** 

Attachment

FR-126



# California Regional Water Quality Control Board

## North Coast Region William R. Massey, Chairman



Winston H. Hickox
Sucretory for
Environmental
Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb1/ \$550 Skylane Boulevard, Suite A. Santa Rosa, California 95403 Phone: 1 (877) 721-9203 (toll free) • Office: (707) 575-2220 • FAC: (707) 523-0135

July 12, 2002

Mr. Christopher P. Rowney
Demonstration State Forest Program Manager
California Department of Forestry and Fire Pro
Post Office Box 944246
Sacramento, California 94244-2460

· / Henseron	From C Rounay
Co	Co.
Dept.	Phone #
Fex #	Fax#

Subject:

Comments on the Draft Environmental Impact Report for the Jackson

Demonstration State Forest Management Plan.

File:

Timber, general

Dear Mr. Rowney:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Report (DEIR) for the Jackson Demonstration State Forest Management Plan (DFMP). Staff of the North Coast Regional Water Quality Control Board (Regional Water Board) provide the following comments.

The DEIR contains many commendable goals and objectives consistent with the Jackson Demonstration State Forest primary purposes. In general, Regional Water Board staff recommend that the goals and objectives listed throughout the DEIR also recognize the need to protect all beneficial uses of water and comply with water quality objectives in accordance with the Water Quality Control Plan for the North Coast Region, also known as the Basin Plan. For example, the objectives under Goal #3, Watershed and Ecological Processes, should be expanded to include protection of the beneficial uses of water designated in the Basin Plan. The beneficial uses of water of the Noyo and Big Rivers identified in the Basin Plan are shown on Table 2-1 of the Basin Plan (Enclosure).

As mentioned in the DEIR, the U.S. Environmental Protection Agency (USEPA) has established Total Maximum Daily Loads (TMDLs) for sediment in both the Big River watershed and the Noyo River watershed. Regional Water Board staff are currently developing implementation strategies for these TMDLs, which will be incorporated into the Basin Plan as the "Action Plan for the Big River Watershed Sediment TMDL" and the "Action Plan for the Noyo River Watershed Sediment TMDL" (collectively known as the TMDL Action Plans). These two TMDL Action Plans are scheduled to be released in draft form in the spring of 2003 with Regional Water Board hearings in the fall of 2003. The TMDL Action Plans will apply to all land uses and all land owners within the Big River and Noyo River watersheds. Regional Water Board staff recommend that the DEIR and DFMP acknowledge the upcoming TMDL Action Plans. In addition, Regional Water Board staff recommend the DFMP be readily adaptable so as

California Environmental Protection Agency

S Recycled Paper



Mr. Rowney

-2-

July 12, 2002

to comply with the regulations of the TMDL Action Plans for the Big and Noyo River watersheds upon their final approval and adoption into the Basin Plan.

The following are comments relating to specific sections of the DEIR. Each comment is referenced by the corresponding DEIR section number and page number.

Re: Section IIL2.2, Goals and Objectives, Goal #3 (p.28)

The objectives in this section should include the protection of the beneficial uses of water, and where water quality is limited, strive to meet water quality standards while 4 achieving other goals and objectives of the JDSF.

Re: Section III.2.2, Goals and Objectives, Goal #6 (p. 29)

The objectives specified in this section should be expanded to recognize the need to update the DFMP so that it complies with the TMDL Action Plans for the Big and Noyo River watersheds upon final approval and adoption into the Basin Plan.

Re: Section IV.3.2, Decisions and Approval Subsequent to Management Plan (pp. 50-51)

In regards to Timber Harvest Plans (THPs), the DEIR indicates that "Activities as part of an approved THP are exempted from Waste Discharge Requirements." Currently, there is a general waiver (not an exemption) of Waste Discharge Requirements (WDRs) for timber harvest activities. However, this waiver will sunset on January 1, 2003, in accordance with Senate Bill (SB) 390 (1999). The State Water Resources Control Board (SWRCB) will hold a public workshop on July 17, 2002, to receive comments from the staff of (RWQCBs), other governmental agencies, and interested parties regarding implementation of the provisions of SB 390 as they pertain to discharges of waste from silvicultural activities.

RWQCBs generally directly regulate waste discharges to the State's waters through the issuance of waste discharge requirements. Pursuant to Section 13269 of the California Water Code, many years ago most RWQCBs adopted policies waiving direct regulation of several categories of waste discharges, including those from silvicultural activities that comply with the Basin Plan.

SB 390 amended Section 13269 of the California Water Code to provide for the expiration of existing waivers for all categories of discharges on January 1, 2003. These amendments provide that:

- Waivers in effect on January 1, 2000, remain in effect until January 1, 2003, unless a RWQCB terminates the waiver prior to that date.
- A RWQCB may renew for a five-year period any waivers that were valid on January 1, 2000, and have not been terminated prior to January 1, 2003. (Failure to renew waivers will automatically result in their termination.)
- Prior to renewal of any waiver for a specific type of discharge, a RWQCB must review the terms of the waiver policy at a public hearing and shall determine whether the discharge for which the waiver policy was established should be subject to general or individual WDRs.

California Environmental Protection Agency





Mr. Rowney - 3 - Inly 12, 2002

 The SWRCB and the RWQCBs must require compliance with the conditions on which waivers are granted.

The SWRCB and RWQCBs are conducting a review of existing waivers for waste discharges from silvicultural activities. This review may result in developing a model waiver for adoption by the RWQCBs or other approaches to comply with applicable legal requirements.

As a result of workshops and hearings on this matter, the Regional Water Board may determine that silvicultural activities may need to meet certain conditions to allow for a waiver of waste discharge requirements. Accordingly, the DEIR and DFMP should ensure that any changes to the waiver policy for silvicultural activities are readily incorporated into the DFMP.

Re: Section VI.3, General Description of Alternatives (pp. 61-63)

The chosen alternative should incorporate a primary management approach to protect all beneficial uses of water. As Alternative E already recognizes the protection of water quality as a primary management goal, Alternative E would be consistent with the Basin Plan and its provisions for protecting the beneficial uses of water.

Re: Section VI, Table 6, Comparison of Management Approach and Elements Among Proposed Alternatives, Herbicide Application (p. 67) and Section VII.8.2, Hazardous Materials (pp. 317-322)

The DEIR states that "The North Coast Regional Water Quality Control Board (NCRWQCB) has no additional requirements beyond those of the County." Please be aware that the Basin Plan includes water quality objectives related to Pesticides. Toxicity, and Chemical Constituents. For instance, the Toxicity objective specifies that "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life." The Basin Plan water quality objective for Pesticides states, in part, that "No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. There shall be no bioaccumulation of pesticide concentrations found in bottom sediments or aquatic life." In addition, the "Action Plan for Control of Discharges of Herbicide Wastes from Silvicultural Applications," contained in the Basin Plan would apply to JDSF whenever aerial applications of herbicides to forest lands are conducted. In general, Regional Water Board staff recommend the avoidance of any herbicide discharges to surface waters. In addition, Regional Water Board staff recommend the DEIR and DFMP specifically describe the management measures which shall be used to avoid herbicide discharges to surface waters.

Re: Section VII.6.1.3, Habitat Protection of Aquatic Resources (pp. 111-114)

Comments numbered 56, 57, 59, 60, 62, and 68, which were provided by the Department of Fish and Game (as found in Appendix 6, p.10), are consistent with the needed protection of water quality and beneficial uses of water.

California Environmental Protection Agency

2 Recycled Paper

July 12, 2002 -4-Mr. Rowney

Re: Class III Watercourses - Section VII.6.1.3, Habitat Protection of Aquatic Resources (pp. 111-114) and Section VII.6.1.6, Project Impacts (pp. 117-123) and Section VII.7.2.3, Geomorphic Processes: Surface Erosion, Road-related Erosion, and Mass Wasting (p. 295) While Class I and Class II watercourse protection measures include significant conifer retention standards and other protection measures to partially address protection of watersheds with threatened and impaired conditions, Class III protection measures are limited to providing only equipment limitation zones (ELZs) as defined in the Forest Practice Rules. The DEIR does not appear to acknowledge that under certain circumstances, Class III canopy retention standards may be necessary to mitigate or avoid impacts (such as increased sedimentation or bank and channel instability resulting from altered flow patterns) to downstream Class I and Class II watercourses from specific projects. Such mitigation measures do not appear to have been considered in evaluating project impacts under Section 6.1.6. Section 7.2.3, Surface Erosion, acknowledges one adverse impact where "The harvest-and site preparation-related 12 impacts on surface erosion are greatest at the heads of Class III watercourses, where increased surface runoff causes uphill migration of the definable watercourse into previously unchanneled portions of the headwall swale (Lewis, 1998)." The DEIR and DFMP should address Class III watercourse-specific concerns for increased surface erosion or altered hydrologic effects that may result in channel instability or increased sedimentation. The DEIR and DFMP should then provide for increased Class III protection measures such as canopy retention standards where needed to avoid or mitigate the project impacts and achieve recovery of impaired waterbodies.

#### Re: Road Management Plan

Regional Water Board staff concur with the goal of the Road Management Plan, which is to "enhance stream channel conditions . . . by reducing both fine and course sediment loading," and to "improve water quality by reducing suspended sediment concentrations and turbidity" (p. 303). Inventories of road and stream crossings, the improvement of existing roads, and the abandonment of roads are positive steps towards reducing sediment discharges. Regional Water Board staff expect that road inventory and roadrelated sediment reduction will be important components of the proposed options in the 14 TMDL Action Plans for the Big River and Noyo River watersheds. In addition, a schedule for road repair may be a required component of the proposed TMDL Action

15 Plans. The Road Management Plan, as described in the DEIR, does not clearly articulate the schedule for implementing road repairs and road abandonment projects identified in the road inventory.

#### Re: Road Management Plan, Inventory (p. 113)

In addition to roads, skid trails also contribute sediment to watercourses, especially at watercourse crossings or where gully and rill erosion along old skid trails intersect a watercourse. Regional Water Board staff recommend the DEIR and DFMP consider an expanded evaluation of skid trail erosion sites as a part of the road inventory to ensure that significant discharges of sediment to watercourses are addressed.

## Re: Road Management Plan, Use Restrictions (p. 113)

The use restrictions for wet weather operations specified in the DEIR may not be adequate to avoid significant sediment inputs which will further impair water quality. In

California Environmental Protection Agency



Mr. Rowney

- 5 -

July 12, 2002

general, Regional Water Board staff recommend the exclusion of heavy equipment operations during the winter period unless necessary for emergency access.

Re: Road Management Plan, Abandonment (p. 114)

Regional Water Board staff recognize the important criteria listed in the DEIR to abandon roads in close proximity to Class I watercourses with anadromous fish habitat. In addition, Regional Water Board staff recommend that the criteria used to identify roads for abandonment should include those roads that are actively discharging sediment or threaten to discharge sediment into any watercourse, further impairing the beneficial uses of water.

Re: Section VII.6.1.4, Monitoring and Adaptive Management (pp. 114-116)

Regional Water Board staff concur with the goals of the Monitoring and Adaptive

Management section and the high priority given to monitoring hillslope and stream channel conditions. Both hillslope effectiveness monitoring and instream trend monitoring are expected to be important components of the proposed TMDL Action Plans for the Big River and Noyo River watersheds.

Re: Section VII.6.1.4, Monitoring and Adaptive Management, Stream Channel Conditions (p. 115)

The in-stream monitoring parameters listed in the DEIR and DFMP are important parameters for monitoring sediment and other impacts to water quality. Large woody debris, pool dimension, pool frequency, embeddedness, substrate size distribution, longitudinal profiles, and benthic macroinvertebrate sampling are all parameters listed with associated water quality targets in the Big River and Noyo River Sediment TMDLs established by the USEPA. The TMDLs also include a water quality target for V\*, which should be included as a monitored parameter for stream channel conditions in the DEIR and DFMP. In some instances, other in-stream monitoring parameters, such as turbidity and suspended sediment concentrations, may be useful when a monitoring program is properly designed to document the effects of specific management activities

on water quality.

Re: Section VII.6.1.4, Monitoring and Adaptive Management, Stream Temperature (pp. 115-116)

Regional Water Board staff concur with the continued collection of stream temperature data as stated in the DEIR. The Big River is currently proposed to be listed on the Watch List for temperature impairment under the Clean Water Act Section 303(d) List of

Inst for temperature impairment under the Clean Water Act Section 303(d) List of Impaired Waterbodies by staff of the State Water Resources Control Board (SWRCB). The SWRCB will hold a public hearing on this issue in September 2002. The temperature data gathered from Jackson Demonstration State Forest and provided to the Regional Water Board was used by Regional Water Board staff in the assessment of temperature conditions for the Big River.

Re: Section VII.6.1.6, Project Impacts, Sedimentation (p. 118) and Section VII.10.4.3, Project Impacts, Violate any water quality standards or waste discharge requirements (pp. 375-376)

The DEIR states that "Erosion from road related . . . erosion is expected to continue dropping as the Road Management Plan on the State Forest is implemented . . .

California Environmental Protection Agency



Mr. Rowney

-6-

July 12, 2002

Therefore, this [sedimentation] is considered a less than significant impact." As the Road Management Plan does not specify a schedule for the implementation of road repairs and road abandonment projects, there is no expectation that erosion from roads will decrease in such a way as to have a less than significant impact on the beneficial uses of water. As the TMDL Action Plans for the Big River and Noyo River watersheds are likely to specify a schedule for road repair and reduction of sediment discharges, Regional Water Board staff recommend the DFMP be adaptable so as to incorporate the provisions of the TMDL Action Plans upon their final approval. In the mean time, the reduction of sedimentation and erosion in the DER and DFMP should consider the Big River and Noyo River Sediment TMDLs established by the USEPA which lay out the

25 major sediment sources and specify sediment load allocations to each source, including natural and management related sources of landslides, surface erosion, and stream bank erosion.

Re: Section VII.7.4, Proposed IDSF Management Measures, Hillslope Management to Provide for Slope Stability (p. 302)

Regional Water Board staff concur with the goal of the DFMP to mitigate and maintain Most slope stability during forest management activities that will prevent damage to aquatic habitat and control sedimentation. Regional Water Board staff recommend the priority for slope stability projects also be given to those anthropogenic sediment sources which 27 pose the greatest threat to water quality, regardless of the connection of the sediment source to a THP or other management related activity.

Re: Section VII.10.4, Regulatory Framework, Federal Clean Water Act (p. 372) The sediment load allocations listed in both the Big River and Noyo River Sediment TMDLs call for significant reductions is sediment delivery from several anthropogenic sources, including harvest related mass wasting; skid trail related mass wasting and surface erosion; road related mass wasting, surface erosion, and fluvial erosion; railroad related mass wasting; and grassland landslides. While road related erosion requires the largest reductions, the DEIR and DFMP should recognize reductions in the delivery of sediment from all sources are important for the protection of the beneficial uses of water.

Re: Section VII.10.4, Regulatory Framework (pp. 372-373) This section does not recognize the beneficial uses identified in the Basin Plan for the Big River and Noyo River (see Enclosure). The existing beneficial uses for both the Big and Novo Rivers include: Municipal and Domestic Supply (MUN); Agricultural Supply (AGR) for the Big River only; Industrial Service Supply (IND); Groundwater Recharge (GWR); Water Contact Recreation (REC 1); Non-Contact Water Recreation (REC 2); Commercial and Sport Fishing (COMM); Cold Freshwater Habitat (COLD); Wildlife Habitat (WILD); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); and Estuarine Habitat (EST). Both rivers are also listed with the potential Aquaculture (AQUA) beneficial use.

> California Environmental Protection Agency 🖒 Racycled Paper

Mr. Rowney

-7-

July 12, 2002

Thank you again for the opportunity to comment on the DEIR. For questions regarding the TMDL Action Plans for the Big and Noyo River watersheds, please contact Rebecca Fitzgerald at 707-576-2650 or fitzr@rb1.swrcb.ca.gov. For all other questions, please contact Christine Wright-Shacklett at 707-576-2686 or wrige@rb1.swrcb.ca.gov.

Sincerely.

Frank Reichmuth

Assistant Executive Officer

RMF:olb/JDSFDBIRComment

cc: Mr. Vince Taylor, Campaign for Restoring Jackson State Redwood Forest, Post Office Box 1066, Mendocino, California 95460

California Environmental Protection Agency

Recycled Paper

# California Water Quality Control Board, North Coast Region Letter FR-26

STATE OF CALIFORNIA—THE RESOURCES AGENCY

GRAY DAVIS, Governor

### DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246 Sacramento, CA 94244-2460 Website: www.fire.ca.gov (916) 653-7772



R1

September 10, 2002

Frank Reichmuth California Regional Water Quality Control Board North Coast Region 550 Skylane Boulevard, Suite A Santa Rosa, CA 95403

RE: Responses to California Regional Water Quality Control Board Comments on Draft EIR to the Jackson Demonstration State Forest Draft Management Plan (SCH #2000032002) - Reference: FR-126

Dear Mr. Reichmuth:

Thank you for your comments on the Jackson Demonstration State Forest (JDSF) Draft Environmental Impact Report (DEIR). Our responses follow below. Please note that the "Response numbers" correspond with the comment numbers as assigned in Exhibit Letter #126, a copy of which is attached.

A number of the comments in your letter address the proposed management provisions set forth in the Jackson Demonstration State Draft Forest Management Plan (DFMP), and do not directly apply to the content of the DEIR. The DEIR analyzes the environmental impacts of the DFMP, and addresses or dismisses from consideration several alternatives to the proposed management provisions. This analysis describes why specific management provisions that may be preferred by the Water Quality Control Board are not incorporated or advanced in the draft plan. While some might be noted or briefly addressed in the responses below, those comments regarding content of the DFMP and not the DEIR are generally beyond the scope of required responses as mandated by the California Environmental Quality Act (CEQA).

As the Lead Agency, the Department of Forestry and Fire Protection (CDF) is provided under CEQA the authority to determine "threshold of significance" for impacts on environmental resources based upon qualitative or quantitative standards. CEQA presumes that compliance with existing regulatory standards results in less than significant impacts to resources. Section 15064.7, Subdivision (h), of the CEQA Guidelines, provides that the Lead Agency shall "rely on the vast body of regulatory standards" that have already undergone rigorous public agency review in determining thresholds of significant impacts. Said Subdivision (h), however, also establishes flexibility for the Lead Agency to establish whether existing regulatory standards are sufficient to protect an environmental resource from any potentially significant impact that may result from the proposed project.

The basis for the Lead Agency's determination of whether a standard applies in a particular case must be based on "substantial evidence in the record that [the] standard is inappropriate to determine the significance of an effect." The Lead Agency is not required to base its determination of applicable standards on information presented by project opponents that a standard is or is not appropriate or effective to protect a resource.

Specific responses follow.

### **Comment 1:**

The goals and objectives identified in the DEIR should also recognize the need to protect all beneficial uses of water and comply with water quality objectives in accordance with the Water Quality Control Plan for the North Coast Region.

### **Response to Comment #1:**

As stated on page 25 of the DEIR, "The overriding purpose, goals, and objectives for State demonstration forests in general are clearly set forth by the California legislature and in the Board of Forestry and Fire Protection policies. This guidance sets the framework for specific purposes, goals, and objectives as specified in the JDSF Management Plan." Page 26 of the DEIR states: "The goals and objectives for the DFMP are synonymous with the project goals and objectives for this EIR." The goals and objectives are related to management of the Forest. Inherent to any activity in the state is a requirement to obey all laws, which includes compliance with laws relating to water quality protection such as the Basin Plan. To change the goals and objectives listed throughout the DEIR would in turn require similar changes to the DFMP, and Board Policies set forth by the legislature, which is not practical or necessary. No changes to the DEIR or JDSF Management Plan are required.

### Comment 2:

The DEIR and the DFMP should acknowledge the upcoming TMDL action anticipated to be taken by the Regional Water Board which will apply to all land uses and landowners in Big River and Noyo watersheds.

## **Response to Comment #2:**

The Department acknowledges the upcoming TMDL action by the Regional Water Quality Control Board. However, because implementation strategies for TMDLs are being developed and are currently unavailable for review or discussion, it was considered premature and speculative to discuss TMDL action plans in the DFMP and DEIR (also, see response #3 below). No changes to the DEIR or JDSF Management Plan are required.

### Comment 3:

The DFMP should be readily adaptable to comply with the regulations of the TMDL Action Plans for the Big and Noyo River watersheds upon their approval and adoption into the Basin Plan.

### **Response to Comment #3:**

The DFMP provides adaptability for unknown future regulations that are not currently in place. As provided on page 3 of the DFMP Monitoring and adaptive management are key elements of this plan, and they affect all of the individual management programs as well as the management plan as a whole. While the desired future condition described in this plan creates a diverse forest landscape that is flexible

and able to respond to many changes, the plan cannot anticipate all of the possible developments in how the State Forest can best serve the needs of California's citizens. As part of the ongoing planning for management of the State Forest, the DFMP will be reviewed periodically in the context of changing policies and priorities. Since the timing of these potential changes cannot be predicted, it is not appropriate to institute a fixed schedule of plan reviews. This means that the forest staff must remain familiar with the contents of the plan and alert to external influences that may reduce the plan's relevance and trigger a comprehensive review.

Page 4 (Revisions and Amendments) of the DFMP also provides for revisions and amendments where appropriate. As stated:

"As directed by the Board of Forestry and Fire Protection, the Forest Management Plan is expected to be revised at least every five years. It may also be revised whenever the Director determines that conditions or demands have changed sufficiently to affect goals or uses for the entire Forest. Under a schedule approved by the Board, the Director prepares and the Board approves Forest Management Plan revisions. The Forest manager will continually review conditions of the lands covered by the Plan to assess the need for Plan revisions.

Between revisions, the Plan can be amended to reflect changing conditions. The State Forest Manager can prepare and approve an amendment if the change is not significant; such changes can be expected annually to adjust some of the Plan's details. If the change is significant, the State Forest Manager will prepare the amendment for the Director's approval and, ultimately, for the Board's approval.

Public notification requirements and adherence to CEQA procedures apply to any significant Plan amendments."

Compliance with all laws is a basic standard of behavior, therefore when TMDL Action Plans are known and implemented, operations in JDSF must comply with those Plans. No changes to the DEIR or JDSF Management Plan are required.

#### Comment 4:

Goal #3 in Section II 2.2 on page 28 should include the protection of the beneficial uses of water, and where water quality is limited, strive to meet water quality standards while achieving other goals and objectives of JDSF.

Response to Comment #4:

See response #1.

### **Comment 5:**

The DEIR indicates that activities undertaken as part of an approved THP are exempted from Waste Discharge requirements. Currently there is a general waiver, not an exemption, which will sunset on January 1, 2003. The DEIR and DFMP should ensure that any changes to the waiver policy for silvicultural activities are readily incorporated into the DFMP.

## **Response to Comment #5:**

Pages 50 and 51 of the DEIR will be revised to delete reference to "exemption from Waste Discharge Requirements" and replaced with a statement that timber operations are, at present subject to a general waiver from Waste Discharge Requirements, however, any modification to the policy which provides for the waiver may affect subsequent Timber Harvesting Plans.

Also, see response #3.

### **Comment 6:**

The chosen alternative should incorporate a primary management approach to protect all beneficial uses of water.

### **Response to Comment #6:**

The DFMP (the DEIR's Preferred Alternative C) is designed to achieve specific goals that comply with the statutory direction given to the State Forests by the Legislature. The Legislature authorized the Board of Forestry to develop policies that guide the management of the state forest system. Board Policy 0351.2 (page 10, DEIR) states, "The primary purpose of the State forest program is to conduct innovative demonstrations, experiments, and education in forest management. All State forests land uses should serve this purpose in some way." Additionally, Board Policy states, "Timber production will be the primary land use on Jackson, Latour, and Boggs Mountain State Forests."

The DEIR and DFMP analyze and propose management strategies that are designed to achieve the goals and objectives of the Legislature and Board of Forestry and Fire Protection predicated on compliance with all laws of the State. There is no need to establish a primary goal of protection of compliance with the Basin Plan just as it is not necessary to set a primary goal of compliance with the California Endangered Species Act. Such compliance is mandated and development of the goals and objectives is accomplished within that context.

No changes to the DEIR or JDSF Management Plan are required.

## Comment 7;

Alternative E would be consistent with the Basin Plan and its provisions for protection of beneficial uses of water.

# **Response to Comment #7:**

The DEIR determined Alternative E to be the environmentally superior alternative and recognized protection of water quality as a primary management goal. Alternative C was determined to best comply with the Legislative Intent and Board Policies set for management of JDSF. Protection of water quality is recognized under Alternative C. No changes to the DEIR or JDSF Management Plan are required.

# **Comment 8:**

The DEIR incorrectly states that the Regional Water Quality Control Board has no additional requirements beyond those of the County relative to the use of pesticides and toxic substances. The Basin Plan includes water quality objectives related to pesticides, toxicity, and chemical constituents.



## **Response to Comment #8:**

The use of hazardous chemicals and applicable regulations were reviewed in Section 8 of the DEIR (page 314-328). The Basin Plan was omitted from Section 8.2.3 (*Regulation of Pesticides and other Hazardous Materials*). However, it is applicable to CDF operations on JDSF. The Basin Plan should be listed and referenced in Section 8, and included in Appendix 7 (*References*).

### Comment 9:

The Basin Plan also contains an "Action Plan for Control of Discharges of Herbicide Wastes from Silvicultural Applications" which would apply to JDSF whenever aerial application of herbicides to forest lands are conducted.

## **Response to Comment #9:**

Aerial application of herbicides is not proposed on JDSF under the proposed DFMP. Aerial applications in JDSF have not been conducted for at least 25 years (personal correspondence July 22, 2002 Marc Jameson and Ross Johnson). Requirements of the Basin Plan relating to the toxicity and pesticide objectives are standards that must be met in the course of using any materials that have the potential of violating those standards. No change of the DEIR or DFMP is necessary.

### Comment 10:

The DEIR and DFMP should specifically describe the management measures which shall be used to avoid herbicide discharges to surface waters.

### **Response to Comment #10:**

The DFMP proposes a limited use of herbicide applications that will comply with statewide adopted regulations and standards and the Basin Plan. Beyond that, no specific management plan is proposed to avoid herbicide discharge to surface waters.

The DEIR identifies existing State and Federal regulatory measures, the purpose of which, in part, is to protect downstream water quality. Please see Section 8.2.3 (Regulation of Pesticides and other Hazardous Materials) of the DEIR (p. 320).

### Comment 11:

Comments numbered 56, 57, 59, 60, 62, and 68, provided by Department of Fish and Game, as found in Appendix 6, page 10, are consistent with the needed protection of water quality and beneficial uses of water.

# Response to Comment #11:

Comments numbered 56, 57, 59, 60, 62 and 68 included in Appendix 6, page 10 of the DEIR were provided to CDF by the Department of Fish and Game in a letter dated September 4, 2001 in response to DFG's review of the JDSF DFMP during the scoping period. These scoping comments were used in the development of the Alternatives analyzed in the DEIR. Although these comments are considered consistent with NCRWQCB's opinion of needed protection of water quality and beneficial uses of water, Alternative C with its provisions was determined to best comply with the Legislative intent and Board Policies set for management of JDSF. No changes to the DEIR or JDSF Management Plan are required. Comments 12 & 13:

The DEIR and DFMP should address Class III watercourse,-specific concerns for increased surface erosion or altered hydrologic effects that may result in channel instability or increased sedimentation. The DEIR and DFMP should then provide for increased Class III protection measures such as canopy retention standards where needed to avoid or mitigate the project impacts and achieve recovery of impaired waterbodies.

Response to Comments #12 & 13

Class III watercourse-specific concerns will be addressed at the project level during THP preparation. The DFMP on page 70 describes that "Bank stability will be promoted by retaining vegetation, establishing equipment exclusion zones (EEZs) or equipment limitation zones (ELZs) along watercourses, and prohibiting ignition of prescribed fire near watercourses. Since JDSF is a publicly owned property available for research purposes, protection measures assigned to riparian areas are to remain sufficiently flexible for conducting research on the adequacy of differing riparian protection measures." Also, "Due to both the research and demonstration mandate for JDSF and the need for flexibility based on site-specific requirements, a range of possible riparian prescription measures will be possible." No changes to the DEIR or JDSF Management Plan are required.

#### Comment 14:

Road inventory and road-related sediment reduction will be important components of the proposed options in the TMDL Action Plans for Big River and Noyo River watersheds. A schedule for road repair may be a required component of the proposed TMDL Action.

**Response to Comment #14:** 

See responses #2 and #3.

### Comment 15:

The Road Management Plan, as described in the DEIR does not clearly articulate the schedule for implementing road repairs and road abandonment projects identified in the road inventory.

## **Response to Comment #15:**

Scheduling is one of the six main components of the Road Management Plan presented in the DFMP. As described in the DFMP and DEIR, the Road Management Plan consists of a sequential process that involves an inventory and prioritization phase prior to scheduling of specific repairs. The DFMP states that the inventory process will encompass approximately 100 miles of road per year, and will take up to five years to complete. Prioritization of repair sites will be based primarily on the potential to impact critical habitat for steelhead and coho salmon, and secondarily on existing rates of sed iment delivery to sensitive watercourse channels and likely hazards such as high density of riparian roads or stream crossings. The schedule for implementing road repairs and abandonment projects identified in the road inventory is not currently known, but will follow certification of the Final EIR by the Director, and approval of the JDSF Management Plan by the Board. It is premature to "clearly articulate" a repair schedule, until completion of the inventory phase. No changes to the DEIR or JDSF Management Plan are required.

### Comment 16:

The DEIR and DFMP should consider an expanded evaluation of skid trail erosion sites as a part of the road inventory to ensure that significant discharges of sediment to watercourses are addressed.

### **Response to Comment #16:**

The DEIR identifies on page 300 in the "Rapid Sediment Budget" discussion, that it is estimated that approximately 74% of sediment results from road-related surface erosion and road-related landsliding. This estimate established the need for the Road Management Plan analyzed in the DEIR and contained in the DFMP. Road sites are the currently identified priority for treatment due to the predominance of sediment originating from these sites. Over time, as implementation occurs and road related sites are corrected, it may be identified that skid trail erosion sites would become a focus as a priority for correction. The DFMP provides for this consideration on page 4. See response 3 also. No changes to the DEIR or JDSF Management Plan are required.

### Comment 17:

In general, there should be an exclusion of heavy equipment operations during the winter period unless necessary for emergency access.

## **Response to Comment #17:**

The Road Management Plan contains specific criteria intended to minimize road use during wet weather periods. These restrictions apply to truck traffic and other forms of heavy equipment. Also, Forest Practice Rules (FPR) 916.9 requires protection and restoration in watersheds with threatened or impaired values and provides for limited use of heavy equipment operations during the winter period. Finally, the DFMP states on p. 76 (item 22, under Hillslopes heading) that winter period operations are to be avoided, except for timber falling and erosion control maintenance. This generally precludes off-road heavy equipment operations not restricted by the Road Management Plan. CDF believes that these criteria address the potential impacts of wet weather operations with more precision and effectiveness than the suggested approach. Further, the focus on wet conditions applies the restrictions in parts of the fall and spring in addition to the winter. No changes to the DEIR or JDSF Management Plan are required.

#### Comment 18:

The criteria used to identify roads for abandonment should include those roads that are actively discharging sediment or threaten to discharge sediment into any watercourse, further impairing the beneficial uses of water.

# **Response to Comment #18:**

Active or likely sediment discharge from a road to a watercourse would not necessarily require road abandonment. If the road is an essential element of the road system, it may be retained in an improved configuration wherein the sediment production potential has been mitigated. However, of the roads that are no longer required, those that exhibit existing or potential sediment discharge will be given the highest priority for abandonment. No changes to the DEIR or JDSF Management Plan are required.

### Comment 19:

Water Board staff concur with the goals of the Monitoring and Adaptive Management section and the high priority given to monitoring hillslope and stream channel conditions.



### **Response to Comment #19:**

This comment concurs with the DFMP and DEIR. No changes to the DEIR or JDSF Management Plan are required.

### **Comments 20 & 21:**

In some instances, in-stream monitoring parameters other than V\* may be useful for monitoring stream channel conditions when a monitoring program is properly designed to document the effects of specific management activities on water quality.

### Response to Comments #20 & 21:

Stream channel condition monitoring described in the DEIR on page 115 was taken from the Plan on page 103. On page 103 of the Plan it is described that, "Methods will also be consistent with the current survey methods for woody debris and channel conditions...." As the Plan provides for adaptive management, should it be determined by CDF that V-star (V\*) should be included as a parameter for stream channel monitoring in addition to the stated parameters to be consistent with current survey methods, the Plan can be revised as described on page 4 of the Plan. A discussion of the V\* index is provided on page 108 of the DEIR. No changes to the DEIR or JDSF Management Plan are required.

### Comment 22:

Water Board staff concur with the continued collection of stream temperature data for Big River which is currently proposed to be listed on the Watch List for temperature impairment under the Clean Water Act Section 303(d) List of Impaired Waterbodies.

**Response to Comment #22:** 

See response #19.

#### Comment 23:

As the Road Management Plan does not specify a schedule for the implementation of road repairs and road abandonment projects, there is no expectation that erosion from roads will decrease in such a way as to have a less than significant impact on the beneficial uses of water.

Response to Comment #23:

See response #15.

### Comment 24:

As the TMDL Action Plans for the Big River and Noyo River watersheds are likely to specify a schedule for road repair and reduction of sediment discharges, the DFMP should be adaptable so as to incorporate the provisions of the Action Plans upon their final approval.

### **Response to Comment #24:**

At this time, the TMDL Action Plans for Big River and Noyo River are unknown, and discussion of a schedule for implementation of their provisions is speculative. Also, see response #3 regarding adaptability. No changes to the DEIR or JDSF Management Plan are required.



### Comment 25:

The reduction of sedimentation and erosion in the DEIR and DFMP should consider the Big River and Noyo River Sediment TMDLs established by the USEPA which lay out the major sediment sources and specify sediment load allocations to each source, including natural and management related sources of landslides, surface erosion, and stream bank erosion.

## **Response to Comment #25:**

The DEIR does consider the Big River and Noyo River sediment TMDLs established by the USEPA. In the Hydrology and Water Quality section on page 368 of the DEIR, is a discussion of the TMDLs established for Big River and Noyo River related to sediment. This is followed on page 372 with a discussion of the regulatory Framework where it is described "Actions resulting from the Forest Management Plan may be subject to the Federal Clean Water Act."

Proposed JDSF Management Measures beginning on page 373 discuss measures in the Plan to achieve water quality goals including reduced sediment input. Thresholds of significance, beginning on page 374 in the DEIR include the following threshold:

"An impact of the proposed project would be considered significant to water quality if it results in...(a violation of) any water quality standards."

This would include the sediment TMDLs established by the USEPA.

No changes to the DEIR or JDSF Management Plan are required.

### Comment 26:

Water Board staff concur with the goal of the DFMP to mitigate and maintain slope stability during forest management activities that will prevent damage to aquatic habitat and control sedimentation.

**Response to Comment #26:** 

Concurrence of RWQCB noted.

### Comment 27:

The priority for slope stability projects also should be given to those anthropogenic sediment sources which pose the greatest threat to water quality, regardless of the connection of the sediment sources to a THP or other management related activity.

# **Response to Comment #27:**

Based on data generated in studies within JDSF and other forested environments, the primary source of "anthropogenic sediment" is roads. As road-related sediment sources are addressed in the Road Management Plan, it appears the DFMP adequately addresses the majority of potential anthropogenic sources. Further, as one of the stated Forest Management Goals (p. 5 of DFMP, #3) is to "promote and maintain the health, sustainability, ecological processes, and biological diversity of the forest and watersheds," it is incumbent upon the JDSF forest managers to address and mitigate significant sediment sources "regardless of the connection...to a THP or other management related activity." No changes to the DEIR or JDSF Management Plan are required.

#### Comment 28:

While road related erosion requires the largest reductions, the DEIR and DFMP should recognize reductions in the delivery of sediment from all sources are important for the protection of the beneficial uses of water.

**Response to Comment #28:** 

The DEIR and DFMP do recognize that reductions in sediment delivery from all sources is important for the protection of the beneficial uses of water, and not just from road related sources. On page 374, the DEIR contains the following:

"In the effort to achieve the hydrologic water quality goals, the DFMP incorporates measures addressing the following issues:

- Special Concern Areas (Appendix III of the DFMP), which includes watercourse and inner gorge protections.
- Road Management Plan (Appendix VI of the DFMP).
- Silviculture Allocation Plan (Chapter 3, DFMP pages 48-51).
- Hillslope Management to Provide for Slope Stability (Chapter 3 DFMP page 71).
- These measures (detailed in the geology and forestry sections) effect hydrology and water quality by working to reduce sediment, turbidity, and peak flow issues related to timber management."

Also, see response #16 which provides discussion on the priority of sediment reduction from road related sources.

No changes to the DEIR or JDSF Management Plan are required.

#### Comment 29:

DEIR Section VII 10.4, Regulatory Framework, pp. 372-373, does not recognize the beneficial uses identified in the Basin Plan for Big River and Noyo River.

**Response to Comment #29:** 

This section discusses the general regulatory framework in place, not necessarily the individual beneficial uses identified in the Basin Plan. Page 373 contains discussion of the water quality objectives from Section 3 of the Basin Plan that protect the identified beneficial uses. No changes to the DEIR or JDSF Management Plan are required.

If you have any questions, please contact Chris Rowney, Resource Management at (916) 653-9420 or email at <a href="mailto:chris.rowney@fire.ca.gov">chris.rowney@fire.ca.gov</a>.

Sincerely,

Ross Johnson Deputy Director Resource Management

Attachment

GP-129

STATE OF CALIFORNIA - RESOURCES AGENCY

GRAY DAVIS, GOVERNOR

# DEPARTMENT OF PARKS AND RECREATION

### MENDOCINO DISTRICT

2 Miles N. of Mendocino, Hwy 1. Post Office Box 440 Mendocino, California 95460 (707) 937-5804



JUL **15 2002** 

July 11, 2002

Christopher P. Rowney
Jackson Demonstration State Forest Program Manager
California Department of Forestry and Fire Protection
P.O. Box 944246
Sacramento, CA 94244-2460

Dear Mr. Rowney:

The California Department of Parks and Recreation has prepared a list of comments on the Draft Environmental Impact Report (DEIR) for the Jackson Demonstration State Forest Management Plan (DFMP). Due to limited staff time, we have focused review and comment on those areas, which most directly affect parklands or State Park values. The following is State Park's response:

- 1. Because the DFMP is non-specific in many areas, and defers many management actions or decisions until an individual THP is developed, it is difficult to evaluate the significance or insignificance of impacts as proposed. For example: on pages 89 and 90 of the DEIR, mitigation is based on individual evaluations by RPFs to reduce the impacts of even-aged timber harvests on scenic vistas to "less than significant". The mitigation as described relies on a future decision and does not provide enough specific information for State Parks to assess whether there will be potential visual impacts from even-aged management within Jackson Demonstration State Forest (JDSF). Mitigation measures that will rely on future decisions by individual RPFs during the THP process are presented throughout the DEIR. So that the Forest Management Plan can be adequately reviewed through the CEQA process, State Parks recommends that the DEIR provide greater detail and show a more thorough impact analysis.
- 2. Although the DEIR states that "JDSF is the largest publicly owned forest in California with a research and demonstration mandate", less than 10% of the total acreage is designated for research areas (Figure M). In keeping with the mandate, State Parks recommends that at least the majority of JDSF be utilized for research purposes. JDSF, being a publicly owned forest, has the unique opportunity to demonstrate and study the use of timber management as a tool to improve forest ecosystem health. The research focus should not be limited to

DEIR Comments - JDSF Draft Management Plan

1

demonstrating forest economics. State Parks knows of no other operation within the state where timber management is being used on a large-scale ecosystem level to recruit and sustain the rapidly dwindling late seral forests. Research should also include designated control areas where "no harvest" treatments are compared to harvest areas. If active management (harvest) is to be used to test the development of late seral forests, then control (no harvest) areas are also needed. The Mendocino Woodlands STA would be an appropriate area for such a control. However, no harvest controls should also be set up in the eastern portion of JDSF to compare microclimate variations, as well. The DEIR also fails to specify how the research elements of timber management are to be funded and implemented. Unless a formal process is developed and funding is designated for research, reviewers of the DEIR have no assurance that the work will be carried out.

- 3. The DEIR summarizes the CDF-Mendocino Woodlands State Park and Outdoor Center Memorandum of Understanding (MOU) on page 85. Since this document is referred to under the regulatory framework that governs management of JDSF, the MOU should be attached (in an Appendix) in its entirety for public review in the context of the DEIR.
- 4. A portion of pygmy forest habitat within JDSF, and adjacent to Jughandle State Reserve, is jointly managed under a memorandum of understanding between CDF and State Parks. The pygmy forest area on JDSF is part of the very popular and unique Ecological Staircase Trail that originates in the State Park Reserve. As part of an overall trail rehabilitation and pygmy forest restoration project, State Parks funded the completion of a boardwalk loop along the badly eroded section of the trail that is actually within JDSF. Unfortunately, vandalism, illegal dumping and other land abuse is prevalent throughout much of the pygmy forest area, both on JDSF and within Jughandle State Reserve. Part of the problem is related to a lack of enforcement staff for both Departments, part is due to the differing recreational management policies of the two Departments, and confusion by the public as to where property boundaries occur. The DEIR should address the impacts associated with illegal activities in JDSF and how these will be prevented or mitigated. The DEIR should also include in the Appendices a copy of the MOU between CDF and State Parks that addresses the Jughandle Reserve area.
- 5. The statements in the DEIR regarding the status of marbled murrelets at Russian Gulch State Park imply that occupation has not been officially confirmed or is uncertain. Annual surveys conducted by trained staff from the Department of Fish and Game, State Parks, or both for at least the past five years have unquestionably confirmed that murrelets are occupying the upper Russian Gulch watershed. Due to the extreme rarity of marbled murrelet habitat in Mendocino County, State Parks and the United States Fish and Wildlife Service consider the Russian Gulch detections to be highly significant. Another notable State Park area that provides murrelet habitat adjacent to JDSF, which should be discussed in the DEIR, is located in the far southeast corner of Mendocino Woodlands State Park. This area is also now adjacent to the newly acquired Big River property, which will soon be transferred to
- State Parks. Overall, State Parks requests that the DEIR correct the statements regarding Russian Gulch, and more thoroughly address the marbled murrelet and late seral forest issues in the context of a regionwide decline in the species and its habitat. Specifically, how does the proposed management of JDSF affect the cumulative loss of marbled habitat throughout the Mendocino County?

DEIR Comments - IDSF Draft Management Plan

2

6. The value and overall reduction of late successional/old-growth redwood habitat is discussed in a general sense on pages 216-218. Page 218 states that only 459 acres of old-growth groves remain in JDSF: as stated on page 172, these areas will be off limits to harvesting. This constitutes less than 1% of the total acreage of the state forest. Page 172 also states that 23% of JDSF will be managed for recruitment of late seral stands. However, these recruitment areas are confined to Class I and II stream riparian zones and the Mendocino Woodlands STA. There is no analysis provided to justify why only these areas are being selected for recruitment, and whether or not limiting the recruitment to these areas will be A enough to sustain functioning old-growth ecosystems within JDSF or in conjunction with any adjacent habitat. How do the existing groves of old-growth within JDSF and the proposed 13 recruitment of late seral stands relate to the regional distribution and loss of late successional habitat within Mendocino County? Will the proposed retention and recruitment areas be enough to provide functioning wildlife corridors for late successional species? Page 264 states that "Although some stands of CWHR 6, 5M, or 5D may be harvested, the actual amount of late-successional habitat that will be removed under the propose action is unknown". The same paragraph goes on to state "the impacts of the proposed action Alternative C are expected to be less than significant on late successional habitats and 15 associated species on JDSF". Based on the lack of biological and cumulative analysis of late successional/old-growth elements, the DEIR do not provide enough information to substantiate this less than significant determination. State Parks favors Alternative E, which emphasizes a late seral management for JDSF and is more compatible with the management of the adjacent State Park lands, than is Alternative C (Management Consistent with the 16 Draft Management Plan). Alternative E is the "environmentally superior alternative" (DEIR. page 77).

7. The Mendocino Woodlands STA has long been an area of dispute. Many members of the public have expressed concern that the original intent of the federal land transfer is not being met under JDSF management. Comments have been strongly made that this area should not be harvested and that the property should be transferred to State Parks. Under CEQA, project alternatives need to be presented and analyzed. Since the STA land transfer to State Parks alternative has been actively and openly discussed, this alternative should at least be considered for public review in the DEIR. At the least, language should be included that Relatifies CDF's previously stated position that transfer of the property to parks would be considered under certain conditions, such as land swap or purchase. The Railroad Gulch Silvicultural Study area, which is located within this STA, is proposed to be harvested under group and single tree selection in 2003 (Map Figure M). The DEIR does not provide an explanation or justification for the proposed harvest within this area. State Parks requests that the DEIR include an alternative, which proposes continued study, but with a treatment of no harvest within this study area. The STA also has a pending nomination before the federal Landmark Committee to include the entire area with Mendocino Woodlands State Park as a 20 National Historic Landmark. The DEIR needs to address the pending historic status of the STA as required under Section 5024 of the Public Resources Code.

8. One of the special concern areas is listed as Jughandle Reserve. Page 155 states that these areas are "non-harvest SCAs". However, the table on page 184 states for Jughandle Reserve "no harvesting within the Pygmy forest portion, limited silviculture in the remainder". Will

DEIR Comments - JDSF Draft Management Plan

- harvesting be proposed in the JDSF Jughandle Reserve SCA, and if so, how much and where? Please clarify and correct the inconsistency in statements between the two pages.
  - 9. Louisa Morris and Teri Jo Barber recently completed a sediment analysis and erosion prevention plan for the Russian Gulch watershed under a DFG grant and contract. The project included both JDSF and State Park lands. Since State Parks is the downstream landowner and manages the lower fisheries habitat in Russian Gulch, we are particularly interested in having erosion corrective measures completed in the watershed, including those problems on JDSF that drain into the park. The DFMP and DEIR should incorporate the findings of this report and discuss when and how such corrective measures can be accomplished.
- 10. Pages 80 and 81 discuss and show a table for cross-referencing of various types of potential impacts. The table does not show recreation cross-referencing with any of the biological or physical resources. These factors are also very important to the recreational element and should be considered in the DEIR discussions. For example: bird watching is becoming an increasingly significant recreational activity that draws people to parks and to JDSF. Many people do come to the Mendocino area for vacations and many local people live here because they enjoy the clean air and the ability to view fish and wildlife.

If you have any questions regarding these comments, please contact Renée Pasquinelli, State Park Senior Ecologist at (707) 937-5804 ext. 111. Thank you for the opportunity to review the Draft Environmental Impact Report for Jackson Demonstration State Forest.

Respectfully,

Perus Farque

Greg Picard

District Superintendent

cc: Ron Brean, Northern Division Chief, Department of Parks and Recreation Rick Rayburn, Natural Resources Division Chief, Department of Parks and Recreation Marc Jameson, Forest Manager, Department of Forestry and Fire Protection

DEIR Comments - JDSF Draft Management Plan

# State Department of Parks and Recreation, Mendocino District Letter GP-129

STATE OF CALIFORNIA—THE RESOURCES AGENCY

GRAY DAVIS, Governor

### DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246 Sacramento, CA 94244-2460 Website: www.fire.ca.gov (916) 653-7772



R1

**September 10, 2002** 

Greg Picard
Department of Parks and Recreation
Mendocino District
P.O. Box 440
Mendocino, CA 95460

RE: Responses to Department of Parks and Recreation Comments on Draft EIR to the Jackson Demonstration State Forest Draft Management Plan (SCH #2000032002) (Reference: GP-129)

Dear Mr. Picard:

Thank you for your comments on the Jackson Demonstration State Forest (JDSF) Draft Environmental Impact Report (DEIR). Our responses follow below. Please note that the "Response numbers" correspond with the comment numbers as assigned in Exhibit Letter #129, a copy of which is attached.

# **Comments 1, 2, & 3:**

The Draft Forest Management Plan is non-specific in many areas, deferring may management actions or decisions until an individual Timber Harvest Plan (THP) is developed, causing difficulty to evaluate the significance of impacts as proposed. Mitigation described in the DEIR does not provide enough specific information to assess potential visual impacts from even-aged management in JDSF. State Parks recommends that the DEIR provide greater detail and show more impact analysis.

## Response to Comments #1, 2, & 3:

The JDSF Draft Environmental Impact Report (DEIR) is a Program DEIR. A Program DEIR is intended to analyze the broad impacts of an action that will receive additional environmental review as specific projects are carried out. In the case of the JDSF DFMP, further CEQA equivalent review will occur on specific timber harvest projects.

The DFMP is a general management plan for JDSF and was analyzed as such in the DEIR. Although there are many specific policies within the DFMP, it allows for a high degree



of adaptive management. Specific adaptive management procedures will receive CEQA equivalent environmental review under the THP process.

## Comments 4, 5, & 6:

Less than 10% of the total acreage of JDSF is designated for research areas, State Parks recommends that at least the majority of JDSF be utilized for research purposes. Research should include control ("no harvest") areas, Mendocino Woodlands and areas in the drier eastern part of JDSF would be appropriate areas for such a control. Lacking a formal process and funding designated for research, there is no assurance that the work will be carried out.

# Response to Comments #4, 5, & 6:

The areas designated for research on JDSF (Figure M in the DEIR) are not the only areas utilized for research projects. A section of the DFMP beginning on page 87 provides an in-depth description of current research and demonstration projects as well as the planning for future research and demonstrations. As evidenced in the list of current projects, the research focus goes well beyond and is not limited to demonstrations of forest economics. Funding for the research and demonstration projects are funded by the net receipts from timber harvests on JDSF and represent a significant reinvestment into the Forest (JDSF DFMP, page 26). Also, as described in the DFMP on page 91, beginning in fiscal year 2000, funds have been allocated from the Forest Resource Improvement Fund (FRIF) to support expanded research within the State Forest system through a competitive grants program. The process for identification of research needs, prioritization, funding allocation, and project implementation is also described on pages 91-92 of the DFMP. No changes to the DEIR or DFMP are required.

## **Comment 7:**

The MOU addressing the Mendocino Woodlands State Park and Outdoor Center should be included as part of the Appendix in the DEIR.

# **Response to Comment #7:**

The following reference should be added to Appendix 7 of Volume 2 of the DEIR:

"CDF-Mendocino Woodlands State Park and Outdoor Center Memorandum of Understanding, October 2000."

The MOU will be made available to the public by CDF if it is not currently available.

### **Comment 8:**

The DEIR should address the impacts of illegal activities in JDSF and how these will be prevented or mitigated. Should also include a copy of the MOU between CDF and State Parks that addresses the Jughandle Reserve area.

### **Response to Comment #8:**

The DEIR addresses environmental impacts related to the DFMP. Illegal dumping, while a nuisance that would be nice to curtail, is largely beyond the control of CDF and the DFMP. The following reference should be added to Appendix 7 of Volume 2 of the DEIR:

"Department of Parks and Recreation, Northern Region, and the Department of Forestry and Fire Protection Memorandum of Understanding: Administration of "Pygmy Forest" Lands, Region 1, December 1986."

The MOU will be made available to the public by CDF if it is not currently available.

### Comments 9, 10, & 11:

Statements in the DEIR regarding the status of marbled murrelets at Russian Gulch State park as unconfirmed or uncertain are incorrect. Surveys for the past five years have confirmed the presence of marbled murrelets in the upper Russian Gulch watershed. The southeast corner of Mendocino Woodlands State Park is also a notable area for murrelet habitat. The DEIR should be corrected regarding these sites and should discuss the impact of proposed management of JDSF on cumulative loss of marble murrelet habitat throughout Mendocino County.

## Response to Comments #9, 10 & 11:

The results of the CNDDB query completed in preparation of this document (See page 225 of the DEIR) did not indicate that murrelets occur in the vicinity of Russian Gulch State Park. However, based on the information provided in this comment and in discussion with Rene Pasquinelli of the Park, the language of the first paragraph on page 248 of the DEIR should be changed to read as follows:

"There have been numerous inland detections near JDSF. The first detection was in Russian Gulch State Park in 1976 (Paton and Ralph 1988), and the second detection was apparently 1km (0.6mi.) east of the town of Mendocino in 1988 (F. Sharpe, personal communication, as cited in Paton and Ralph 1988).

According to Rene Pasquinelli (personal communication), surveys completed annually over the last five years within Russian Gulch State Park have detected numerous murrelets flying up the Russian Gulch drainage, including "occupied behavior" type observations. Although no nest trees have been identified, this

information suggests that murrelets are nesting in the Park. Although no murrelet detections on JDSF have been confirmed, surveys have not been completed on JDSF adjacent to Russian Gulch State Park."

A sentence should also be added to the end of the second paragraph on page 248 of the DEIR to read as follows:

"However, potential murrelet habitat was identified by Ken Hoffman (USFWS) on former G-P lands in the vicinity of the Mendocino Woodlands Recreation Area (R. Pasquinelli, Personal Communication)."

Please refer to the discussion on pages 246-247 of the DEIR regarding the decline of murrelets and their habitat.

As described and defined in the DFMP, all old-growth groves will be preserved, and individual old-growth trees will be retained except when they pose a safety hazard or lie in a road alignment that cannot be safely re-routed. Additionally, surveys of potential habitat will be completed for proposed projects so no occupied stands will be harvested. Thus, the harvest of old-growth habitat on JDSF is expected to be minimal. This coupled with the fact that not all old-growth trees on JDSF are considered suitable murrelet habitat, the cumulative loss of murrelet habitat as a result of the proposed management of JDSF is expected to be minimal to non-existent. Additional evaluation will be completed on a project basis.

Appendix 7 of Volume 2 of the DEIR should include the following personal communication reference:

"Rene Pasquinelli, Senior State Park Ecologist, California State Parks, Personal Communication, July 9, 2002."

Comments 12, 13, 14, 15, & 16:

There should be an analysis justifying the exclusive use of Class I and II stream riparian zones and the Mendocino Woodlands Special Treatment Area for late seral stand recruitment and analysis to determine if these areas are enough to sustain functioning old-growth ecosystems within JDSF. There is not enough information to substantiate the "less than significant" determination regarding the maintenance of late successional habitat.

Response to Comments #12, 13, 14, 15, & 16

Page 172 of the DEIR which contains language for late seral stand recruitment, describes that recruitment areas will include areas in Class I and II stream riparian zones, the Woodlands Special Treatment Area, and 780 acres adjacent to three old-growth groves to promote development of late seral stand conditions to buffer and enhance the value of these areas for wildlife. Additional discussion on old-growth stands and recruitment areas is in the JDSF

Management Plan on pages 59-61. The plan provides discussion regarding habitat fragmentation and connectivity on pages 41-44.

The DEIR page 264 discusses the present old-growth stand acreage of 459 and the Plan's proposed action of increasing the late seral acreage to approximately 11,190. Although the actual acreage of late-success ional stands that may be harvested as proposed in the plan is unknown, the total acreage on JDSF will increase substantially with retention and recruitment in the areas previously discussed. Analysis of this proposed retention and recruitment action of 20% of JDSF to late seral stands, and retention of late seral stand components (snags, down wood, hardwoods) in harvest areas provided the determination that the proposed action would result in less than significant impacts on late successional habitats and associated species.

Alternative E is determined to be the environmentally superior alternative as stated in the DEIR on page 77, and State Parks prefers this alternative over the preferred Alternative C. However, Alternative C (management consistent with the draft management plan) provides a balance toward resource protection and use of JDSF that is closer to the legislative mandate, and provides for less than significant impacts.

No changes to the DEIR or DFMP are required.

Comments 17, 18, 19, & 20:

The no harvest alternative for the Mendocino Woodlands STA should be considered in the DEIR. Language should be included regarding CDF's previously stated position that transfer of the property to Parks would be considered under certain conditions such as land swap or purchase. The DEIR should include an alternative for no harvest in the Woodlands area. Because there is a pending nomination before the federal Landmark Committee to include the Woodlands State Park as a National Historic Landmark, the DEIR needs to address the pending historic status of the Woodlands STA.

Response to Comments #17, 18, 19, & 20

The Mendocino Woodlands STA is part of a larger parcel of land that was deeded to the State of California by the Federal Government in 1947 and placed under the administration of the Division of Forestry and made part of Jackson Demonstration State Forest. The area has been managed continuously by the Department in compliance with the original deed restrictions for over 50 years.

There have been some informal discussions between CDF and DPR personnel regarding the administration of the STA in recent years, but no plans of have been made to transfer the STA to DPR. While the issue of agency administration of the STA and the potential for "trades" or other action have been discussed in general, the discussions have been preliminary and no plans have been formulated or discussed in detail.

The Railroad Gulch Silvicultural Study was initiated in the early 1980s to serve as a demonstration of selective stand management for the small non-industrial timberland owner. At the time of initiation, it was anticipated that the stand would be harvested selectively on a

periodic basis. There is no requirement that each individual forest demonstration be justified as requested by DPR. When a timber operation is anticipated for the area, a cumulative impacts assessment will be completed and a timber harvest plan will be filed and reviewed. In addition, CDF will consult with DPR, as specified in the legislation that established the STA in 1976.

To continue to study the area, but not to harvest timber, as suggested by DPR, would completely alter the current and original intent of the study, that of a demonstration of forest management for the non-industrial timberland owner.

An application to designate the STA as a National Historic Landmark was submitted by a local citizen. CDF personnel, including a professional archaeologist, evaluated the application and found significant errors and mis-statements, ultimately concluding that the area did not qualify as a National Historic Landmark. The State Historic Preservation Officer also evaluated the application, including a visit to the STA, and determined that designation of the STA as a National Historic Landmark was not warranted at the time, due in part to a significant lack of information and potential errors in the application. In a letter to the federal Landmark Committee, CDF explained why the area did not qualify, and CDF objected to the nomination. The Landmark Committee convened to consider the nomination, and after reviewing both the nomination, available information supplied to the committee, and the CDF response to the nomination, did not designate the STA as a National Historic Landmark.

CDF is in full compliance with PRC 5024 for known structures, facilities, and other resources managed by the Department. Additionally, a full archaeological survey must be performed for each area proposed for harvest under the Forest Practices Act. When field preparation for the next harvest within the Railroad Gulch Silvicultural Study area is initiated, a survey will be conducted and any resources identified will be protected as prescribed by law and the provisions of the DFMP.

### **Comment 21:**

There is an inconsistency regarding the Jughandle Reserve. Page 155 of the DEIR states the area will be a non-harvest Special Concern Area (SCA) while page 184 states there will be no harvesting in the Pygmy forest portion and limited silviculture in the remainder.

# **Response to Comment #21:**

The area within the Jughandle Reserve outside the pygmy forest type will receive limited silviculture. It is presently unknown where and how much harvesting in the Jughandle Reserve will occur in these areas. Clarification to page 155 in the DEIR has been provided.

### Comment 22:

The DFMP and DEIR should incorporate the findings of the report on sediment analysis and erosion prevention plan for the Russian Gulch watershed by Louisa Morris and Teri Jo Barber, and discuss when and how such corrective measures can be accomplished.

# **Response to Comment #22:**

Erosion corrective measures on JDSF are contained in the Road Management Plan (Appendix VI, pages 176-189) of the DFMP and discussed in the DEIR, page 374. The Road Management Plan contains provisions for analyzing sediment delivery to watercourses and provides a methodology to prevent erosion. No changes to the DEIR or DFMP are required.

## **Comment 23:**

The table on pages 80 and 81 for cross-referencing various types of potential impacts does not include recreation cross-referencing with any of the biological or physical resources. This interaction should be considered in the DEIR.

# **Response to Comment #23:**

The DEIR's Table 7 is intended as a general cross-referencing tool for topics that have the highest degree of overlap and need for cross-referencing. Certain impact topics may be considered more or less related, depending upon reader perspective and expertise. The table will direct general "lay" readers to the cross-referenced topics with the most overlap. Each DEIR resource specific section covers overlapping resource analysis. Section VII. 14. Recreation presents a detailed analysis of current and proposed recreational use of JDSF.

If you have any questions, please contact Chris Rowney, Resource Management at (916) 653-9420 or e-mail at <a href="mailto:chris.rowney@fire.ca.gov">chris.rowney@fire.ca.gov</a>.

Sincerely,

Ross Johnson Deputy Director Resource Management

# JPB-131

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

GRAY DAVIS, Gov

Flex your power

DEPARTMENT OF TRANSPORTATION

DISTRICT I, P. O. BOX 3700 EUREKA, CA 95502-3700 PHONE (707) 445-6412 FAX (707) 441-5869 TTY (707) 445-6463

July 2, 2002



1-Men-20-All Jackson Demonstration State Forest Draft Management Plan SCH # 2000032002

Christopher P. Rowney California Dept. of Forestry and Fire Protection 1416 Ninth St. Room 1506-34 Sacramento, CA 95814

Thank you for giving Caltrans the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Comprehensive Update to the Jackson Demonstration State Forest (JDSF) Draft Management Plan. We have reviewed this document, and we offer the following comments:

1. The most recent 20-year Route Concept Report (RCR) for State Route (SR) 20 was completed in 1989. The concept for the segment of SR 20 from Fort Bragg to Willits is a rural minor arterial, two-lane conventional highway on the existing alignment. Future improvement needs listed for this Route include the addition of shoulders and passing lanes or turnouts at appropriate locations. Safety projects will be pursued on an on-going basis in order to be responsive to safety concerns as they are identified.

District 1 System Planning is currently working to update the Route 20 RCR. As part of this update a "Non-Motorized Facilities Strategy" will be 2 included. This section of the RCR generally describes the levels of nonmotorized traffic, and promotes interagency coordination between Caltrans, Mendocino County and Lake County to identify non-motorized facility deficiencies. As part of this effort, Caltrans has developed a methodology to prioritize shoulder improvement needs that will assist planning for future non-motorized projects.

"Caltrans improves mobility across California"

## Rowney Page 2.

- 2. On page 420 of the Comprehensive Update to the JDSF Draft Management Plan, the Mendocino Department of Transportation proposes type 1 and type 2 bikeways. If constructed, this non-motorized facility would have impacts to SR 20 and County Road 408 (Little Lake Road). Therefore, we recommend that two additional sentences be added to the end of the first paragraph under the heading "Bikeways and Other Improvements." These sentences should read: "This project will be consistent with the Caltrans 20-year Route 20 Concept Report for the existing highway facility and future Caltrans projects planned for SR 20. Any work within the State right of way will require an Encroachment Permit from Caltrans." When the County intends to initiate this project, close coordination with Caltrans System Planner Eric Lund should take place. Eric can be reached at 707,445.6407.
- 3. At the bottom of page 420 the list of potential road activities that may occur along SR 20 within the next five years should be updated. This list should read:
  - An approved Project Study Report (PSR) for a safety improvement project (EA 01-29200) has listed five alternatives for a section of SR 20 located west of JDSF (post mile 0.2 to 2.4). After an appropriate 4 alternative is determined and the environmental documentation completed, construction could begin in the 06/07 fiscal year.
  - A safety realignment project (EA 01-41180k) located along SR 20 between post miles 26.2 to 26.8 has been proposed. This project would be located within the JDSF boundary. District 1 anticipates the 5 release of a PSR in fiscal year 02/03. If feasible alternatives are identified within the PSR, construction could begin in fiscal year 08/09.
  - A passing lane project has been proposed along SR 20 within the JDSF boundary (post mile 6.4 to 7.1 eastbound and 13.0 to 13.6  $\binom{l}{l}$  westbound). District 1 will begin work on a PSR for this project if a Project Initiation Document is approved.
  - Culvert replacements are planned at various locations in Mendocino County on State Route 20. Possible construction for this project could occur in the summer of 2004.
  - An Electronic Changeable Message Sign is planned for construction at post mile 0.3 on SR 20.

"Caltrans improves mobility across California"

We look forward to working closely with CDF as this plan moves forward. If you have any questions or need further assistance, please contact Brian Travis of District 1 Community Planning at (707) 441-5812 or me at the number above.

Sincerely,

Rex Jackman,

Transportation Planner

Caltrans District 1 Community Planning

c. T. Peters
County of Mendocino Dept. of Transportation
340 Lake Mendocino Drive
Ukiah, CA 95482

"Oaltrans improves mobility across California"

# State Department of Transportation Letter JPB-131

STATE OF CALIFORNIA THE RESOURCES AGENCY

GRAY DAVIS, Governor

### DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246 Sacramento, CA 94244-2460 Website: www.fire.ca.gov (916) 653-7772



R<sub>1</sub>

**September 10, 2002** 

Rex Jackson California Department of Transportation District 1 P.O. Box 3700 Eureka, CA 95502-3700

RE: Responses to Department of Transportation Comments on Draft EIR to the Jackson Demonstration State Forest Draft Management Plan (SCH #2000032002) - Reference: JPB-131

### Dear Mr. Jackson:

Thank you for your comments on the Jackson Demonstration State Forest (JDSF) Draft Environmental Impact Report (DEIR). Our responses follow below. Please note that the "response numbers" correspond with the comment numbers as assigned in Exhibit Letter #131, a copy of which is attached.

# Response to Comments #1 & 2

The information provided should be included in the Final DEIR, but impact analysis for transportation and traffic remains the same. The following paragraphs provided by Caltrans District 1 will be incorporated into the Final DEIR Transportation and Traffic Section:

> Caltrans' Route Concept Report (RCR) for Highway 20 is a planning tool that is similar to Mendocino County's Level of Service Standard for Highway 20. The most recent 20-year RCR for Highway 20 was completed in 1989 and identifies the portion of Highway 20 from Fort Bragg to Willits as a rural minor arterial, two-lane conventional highway on the existing alignment. Future improvement plans include additional shoulders and passing lanes, or turnouts at appropriate locations.

> Caltrans District 1 System Planning is currently working on updating the Route 20 RCR to include a "Non-Motorized Facilities Strategy." This includes and describes non-motorized traffic and

promotes interagency coordination between Caltrans, Mendocino County, and Lake County to identify non-motorized facility deficiencies.

# 2. Response to Comment #3:

The Mendocino Department of Transportation has plans for a bikeway improvement project that may have impacts on Highway 20 and road 408. Caltrans provided the following paragraph that will be incorporated into the Final DEIR to amend DEIR Section 15.1.3, Bikeways and Other Improvements (p. 420):

This project will be consistent with Caltrans 20-year Route 20 Concept Report for existing highway facility and future Caltrans projects planned for Highway 20. Any work conducted within the State right of way will require an Encroachment Permit from Caltrans. Upon initiation of the project, the County will work closely with the Caltrans System Planner.

No change in impact analysis is necessary.

# 3. Response to Comments #4 to 8:

The list of potential Caltrans projects located within the vicinity of JDSF (DEIR Section 15.1.3, page 420) should be expanded to read as follows:

- a. An approved Project Study Report (PSR) for a safety improvement project (EA 01-29200) has listed five alternatives for a section of Highway 20 located west of JDSF. After an appropriate alternative is determined and the environmental documentation is completed, construction may begin in the June 2007 fiscal year.
- b. A safety realignment project (EA 01-41180k) located along Highway 20 between post miles 26.2 and 26.8 has been proposed. This project would be located within the JDSF boundary. District 1 anticipates the release of a PSR in the fiscal year February 2003. If feasible alternatives are identified within the PSR, construction could begin the August 2009 fiscal year.
- c. A passing lane project has been proposed along Highway 20 within the JDSF boundary (post mile 6.4 to 7.1 eastbound and 13.0 to 13.6 westbound).
- d. Culvert replacements are planned at various locations in Mendocino County on State Route 20. Possible construction could occur in the summer of 2004.
- e. An Electronic Changeable Message Sign is planned for construction at post mile 0.3 on Highway 20.

Changes will be incorporated in an addendum to be prepared for the Final DEIR.

If you have any questions, please contact Chris Rowney, Resource Management at (916) 653-9420 or e-mail at chris.rowney@fire.ca.gov.

Sincerely,

**Ross Johnson Deputy Director Resource Management** 

Attachment





DEPARTMENT OF CONSERVATION
STATE OF CALIFORNIA

To:

Christopher Rowney

Date: July 16, 2002

From:

California Department of Forestry and Fire Protection

P.O. Box 944246 1416 Ninth Street

Sacramento, CA 94244-2460

1027 10<sup>th</sup> Street, 4<sup>th</sup> fidor Sacramento

CALIFORNIA

SECLOSICAL

SURVEY

SACRAMENTO
CALIFORNIA
95814
PHONE

PHONE 916/327-0791

FAX 916/323-9264

INTERNET conservation.ca.gov

GRAY DAVIS

Bill Short

Department of Conservation -California Geological Survey 1027 10<sup>th</sup> Street, 4<sup>th</sup> Floor Sacramento, CA 95814

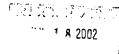
Subject:

Draft Environmental Impact Report for the Comprehensive Update to the Jackson Demonstration State Forest Draft

Management Plan

The Department of Conservation, California Geological Survey (CGS) has reviewed the May 2002 Draft Environmental Impact Report for the Comprehensive Update to the Jackson Demonstration State Forest (JDSF) Draft Management Plan (Draft EIR). Our review has focused on the Geology and Soils related aspects of the Draft EIR. Overall, the document appears to be comprehensive and is presented in an easily understandable format; CGS does however offer the following comment that we believe will make the document more complete.

Within Section 7, Geology and Soils, there are a number of references to areas of special geologic concern, and the "Preliminary Relative Landslide Potential Map" of the JDSF compiled by CGS (e.g. pages 291, 299, 301, and 308). We suggest that these discussions be supplemented through the inclusion of a copy of CGS's Preliminary Relative Landslide Potential Map (Short and Spittler, 2002) in the Draft EIR. Inclusion of this map would provide consistency with other portions of the Draft EIR, which discuss various "Special Concern Areas" and present those areas on a map (Figure H of the Draft EIR). Inclusion in the Draft EIR of CGS's Preliminary Relative Landslide Potential Map would provide a similar graphical representation of the general areas of geologic concern within the JDSF. CGS would be happy to provide copies of the Preliminary Relative Landslide Potential Map if you desire.



Mr. Christopher Rowney Re: Draft JDSF EIR

July 16, 2002 Page 2

NO. 1064

CERTIFIED ENGINEERING GEOLOGIST

### Reference Cited:

Short, W. R., and Spittler, T. E., 2002, Preliminary Map of Geologic and Geomorphic Features Related to Landsliding, and Preliminary Landslide Potential Map, Jackson State Demonstration Forest, Mendocino County, California, scale, 1:24,000, 3 Plates, California Geological Survey, Watersheds Mapping Series Map Set 2, CD 2002-05.

CGS appreciates the opportunity to comment on the Draft JDSF EIR. Please do not hesitate to contact us at 916-322-4853 if you have any questions.

Sincerely,

William R. Short

Senior Engineering Geologist

RG, 4576, CEG 1429, CHG 61

Concur: Trinda L. Bedrossian

RG 3363, CEG 1064

# State Department of Conservation Letter TB-249

STATE OF CALIFORNIA THE RESOURCES AGENCY

GRAY DAVIS, Governor

### DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246 Sacramento, CA 94244-2460 Website: www.fire.ca.gov (916) 653-7772



R1

**September 10, 2002** 

Bill Short Department of Conservation California Geological Survey 1027 10<sup>th</sup> Street, 4<sup>th</sup> Floor Sacramento, CA 95814

RE: Responses to California Geological Survey Comments on Draft EIR to the Jackson Demonstration State Forest Draft Management Plan (SCH #2000032002) - Reference: TB-245

Dear Mr. Short:

Thank you for your comments on the Jackson Demonstration State Forest (JDSF) Draft Environmental Impact Report (DEIR). Our response follows below. Please note that the comment responded to is highlighted in Exhibit Letter #245, a copy of which is attached.

## **Response to Comment:**

Because the CGS map of "Relative Landslide Potential" for JDSF was completed after completion of the DFMP, the data in the CGS map set has not yet been incorporated. Currently, the "Special Concern Areas" identified in the DFMP reflects "shallow landslide potential areas" based on a computer model. The Department accepts the CGS proposal to utilize the recently CGS completed landslide potential maps as the basis for definition of "Special Concern Areas." However, the substitution will not take place until after completion of the environmental review. This is acceptable, as the important point is merely recognition that the best, most recent data will be utilized once implementation of the FMP begins. The CGS comment suggests that copies of the landslide potential maps be included as a reference, but that appears infeasible due to the size of the maps and the limited utility at this time. The Department recognizes that geologic "Special Concern Areas" exist, and that they will be mitigated, even if the current maps showing the specific areas in the DFMP are subject to change. Interested parties may view the recently completed CGS maps by contacting CGS at their Sacramento office.

No change in the DEIR or DFMP is required.

If you have any questions, please contact Chris Rowney, Resource Management at (916) 653-9420 or e-mail at chris.rowney@fire.ca.gov.

Sincerely,

**Ross Johnson Deputy Director Resource Management** 

Attachment

JUL 2 2 2002



PR-320

# UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Southwest Region 777 Sonoma Avenue, Room 325 Santa Rosa, CA 95404

JUL 1 8 2002

F/SWR3:CAA

Mr. Christopher P. Rowney Deputy Chief, State Forest Program California Department of Forestry and Fire Protection P.O. Box 944246 Sacramento, California 94244

Dear Mr. Rowney:

Thank you for the opportunity to comment on the Jackson Demonstration State Forest (JDSF) Draft Environmental Impact Report (EIR) and associated Draft Management Plan (DFMP) dated May 2002. National Marine Fisheries Service (NOAA - Fisheries) fully supports the efforts of the State of California to adopt a long-term management plan for JDSF.

Site specific watershed analyses used to create meaningful timber management strategies in California are important to State and Federal efforts to protect and recover listed anadromous salmonids. The efforts of JDSF, in developing a draft EIR and Forest Management Plan, are laudable work towards a watershed and ownership program that can be protective of aquatic resources. NOAA - Fisheries however, has concern with the apparent prevailing philosophy at JDSF that because modern practices are improved these practices provide adequate protection to aquatic resources. For example a statement in the DFMP: "The potential effects to fish populations and aquatic communities from each alternative are significantly less than during pre-modern FPR operations (DFMP May 2002 Draft)," is part of the argument asserting that prescriptive measures reduce adverse affects to a lessthan-significant level. Thus, these measures provide for habitat needs of Federally listed anadromous salmonids. NOAA - Fisheries believes this underlying philosophy and the thresholds of significance analysis regarding aquatic resources are fatal flaws of the DFMP. Therefore, the following comments focus more on the mechanisms driving the prescriptions than on details of the prescriptions themselves.

Major concerns of NOAA - Fisheries include:

Prescriptive measures that appear disconnected from the goals and objectives described in the intent language.

There is no discussion by JDSF regarding how post harvest stand conditions of 240 square feet basal area translates to the appropriate forest composition, structure and function



(e.g., management used to support and encourage native forest type; basal area by species and age class; conifer canopy versus hardwood canopy; how will post-harvest stand functions to support anadromous salmonid habitats?).

 Application of forest practice standards identified as inadequate for the protection of anadromous salmonids.

> For example, the system of stream classification used by JDSF has little basis in science (Noss, 2000). According to Noss (2000), if relevant scientific data were considered, wider buffers would be provided on headwaters (CDF Class II and III streams). Also, Ligon et al. (1999), indicates that the stream and its floodplain should be considered together as the channel zone. While the DFMP indicates that no operations will occur in channel migration zones, it is unclear how active floodplains are protected. Additionally, how is JDSF addressing cumulative effects across spatial and temporal scales? Effects from timber harvest activities have been found to be more difficult to detect on smaller spatial scales than larger spatial scales. THP activity at the watershed scale has effects to microclimate and other watershed products that cannot necessarily be detected on smaller scales. Chen et al. (1999), found correlations between harvest activity and degraded microclimate variables at the landscape scale which were not detectable at the stand level scale.

Ambiguity of how science (e.g., research conducted on JDSF as well as other research relevant to the redwood region) facilitated the design of the proposed forest management.

It is unclear how research, conducted on the forest, contributed to the design of the currently proposed prescriptions as well as how it will contribute to the future of JDSF.

Lack of a described strategy to avoid "take" (or "harm") to Federally listed anadromous salmonids.

Absent an Endangered Species Act (ESA) section 4(d) limitation on the take prohibitions for forestry activities in California or an ESA section 10(a)(1)(B) permit, the legal standard for timber harvest operations in California is no take. JDSF must avoid harming anadromous salmonids when conducting timber management activities. The goal of the DFMP to "minimize the potential for adverse impacts to aquatic habitat, fish migration, riparian habitat, aquatic species populations" is inappropriate without Federal incidental take authorization. JDSF cannot mitigate for unauthorized "take" of Federally listed anadromous salmonids.

The EIR and DFMP do not support the assertion that JSDF timber harvest will avoid take of Federally listed salmonids. We are confident that this issue can be resolved, and would also encourage the State to explore mechanisms available under the ESA which provide incidental take authorization. The DFMP could provide a strong foundation to a section  $10\,(A)\,(1)\,(B)$  Habitat Conservation Plan, and incidental take permit.

If you have any questions or comments about this letter please contact Mr. Dick Butler at (707)575-6058.

Sincerely,

Patrick J. Rutten

Northern California Supervisor Protected Resources Division

cc: James L. Lecky, NMFS Joe Blum, NMFS

## Bibliography

Chen, J., Saunders, S.C., Crow, T.R., Naiman, R.J., Brosofske, K.D., Mroz, G.D., Brookshire, B.L., & Franklin, J.F. (1999) Microclimate in forest ecosystem and landscape ecology. BioScience, 49, 288-297.

Ligon, F., Rich, A., Rynearson, G., Thornburgh, D., & Trush, W. (1999). Report of the Scientific Review Panel on California Forest Practice Rules and Salmonid Habitat. The Resources Agency of California and National Marine Fisheries Service, Sacramento.

Noss, R.F., ed. (2000) The redwood forest. Island Press, Washington, D.C.

# National Marine Fisheries Service Letter PR-130

STATE OF CALIFORNIA--THE RESOURCES AGENCY

GRAY DAVIS, Governor

### DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246 Sacramento, CA 94244-2460 Website: www.fire.ca.gov (916) 653-7772



R1

**September 19, 2002** 

RE. Letter PR 320 National Marine Fisheries Service

# **Response to Comment 320.1**

The Forest Practice Rules have been improving each year and are providing a higher degree of protection for the resources than was provided previously. CDF recognizes that there are differences of opinion about the adequacy of the standards in the Rules. However, these standards are minimums. The Rules also require a separate CEQA analysis of each Timber Harvesting Plan including review and suggestions by other agencies such as NMFS and the California Department of Fish and Game. The consultation produces additional, individually site-specific mitigation. CDF believes that this combination of tough minimum standards plus review of each plan with additional mitigation as necessary provides a system that produces adequate protection.

# Response to Comments 320.2-6

Class I and II WLPZs will maintain a minimum of 240ft<sup>2</sup> per acre of conifer basal area. JDSF will maintain appropriate forest composition by following all applicable Forest Practice Rules such as 916.5 that states the stand configuration will contain the diversity of species similar to that found prior to operations. Stand structure will be maintained by the minimum overstory retention standards of 85% and 70% in the inner and outer WLPZ bands respectively. In addition, structure and function will be maintained by use of no-cut zones that vary from 25-150 feet wide on Class I watercourses and 25-100 feet wide on Class II watercourses. The LWD mitigation on Class I watercourses is designed to return stands adjacent to streams not meeting wood loading target levels to proper function by using thin-from-below silviculture (retains codominant, dominant, and predominant trees) or no-cut zones. The thin-from-below silviculture will be used to promote the development of large trees in relatively dense, small diameter stands to encourage LWD delivery to streams at a faster rate than if left alone. This should help support and improve anadromous habitat in Class I stream deficient in LWD. The high overstory canopy retention proposed in the DFMP will likely lower water temperatures below those that were achieved under the formerly utilized Forest Practice Rule standards that required 50% overstory retention without any no-cut zones.

## **Response to Comments 320.7**

JDSF is required by the Forest Practice Rules to use the stream classification system currently established for state and private lands in California.

Response to Comment 320.8 Ligon et al. (1999) stated,



A watercourse is composed of an active channel and a floodplain, although the floodplain may be subtle. For example, dense rows of white alders lining the streambank are rooted well below bankfull stage. The floodplain may extend only 10 horizontal feet behind the alders, along channels with 1.5-3.0% channel gradients. On less steep and less confined channels, the floodplain often extends between valley walls with unequivocal evidence of recently abandoned side-channels among dense stands of white and red alders.

# Rosgen (1996) stated,

...the low terrace, by definition, is an abandoned floodplain. The flows necessary to over-top the low terrace bank must be associated with a flood of large magnitude, much larger than the actual bankfull discharge. A low terrace feature is often mistaken for a floodplain by field observers.

In the steeper 1.5-3.0% channels, the floodplain at the 20-year return interval is entirely contained inside the watercourse transition line as defined by the FPR. The 20-year return interval elevation corresponds to an elevation equivalent to twice the maximum depth of the adjacent riffle at bankfull stage.

The mainstem channels of lower Big, North Fork Big, Little North Fork Big, and South Fork Noyo Rivers, and lower Caspar and Hare Creeks are incised in floodplains and have valley fill deposits. Valley bottoms of 3<sup>rd</sup> and 4<sup>th</sup> order basins here are typically about 330 to 660 ft wide and contain floodplains that have well sorted, rounded, and stratified sediment. It is likely that some of the broad valley fills were deposited upstream of large ancient landslide dams. The terraces occupying these broad valleys are typically about 10 to 33 feet above the channel bed and are often characterized by a bedrock strath at their base. The floors of these valleys contain multiple river terraces, which indicates separate episodes of channel incision; the majority of these events appear to have occurred before logging commenced in the late 1800s. Generally, these JDSF channels are entrenched with little or no ability to meander.

Dunne and Leopold (1978) define floodplain as the flat area adjoining a river channel constructed by the river in the present climate and overflowed at times of high discharge. A floodplain under construction (or an active floodplain) is flooded frequently and at a relatively consistent recurrence interval of 1.5 years in the annual flood series. Using this definition, it is likely that most of JDSF's floodplains with valley fills are not "active," but rather low terraces. Flows necessary to over-top low terraces must be associated with a flood of large magnitude-

larger than the actual bankfull discharge. WLPZ width prescriptions in these valley fill areas with incised channels will be modified, where appropriate, to provide adequate floodplain protection.

# Response to Comment 320.9

Please refer to general response #9 regarding cumulative effects assessment.

# **Response to Comment 320.10**

Research conducted on JDSF contributed to the development of prescriptions in many ways. Surveys conducted by CDFG, Napolitano (1998), and others that showed many of the watercourses were deficient in LWD helped determine the riparian retention standards to increase wood loading. Water temperature monitoring conducted over the past several years helped determine overstory canopy retention standards. Spawning gravel embeddedness, V\* estimates, and sediment bulk samples pointed out the need to reduce sediment delivery to streams and influenced the decision to generally restrict tractor yarding to slopes less than 35 to 40%, whereas the Forest Practice Rules allow ground-based skidding on slopes up to 65%. The work conducted by Cafferata and Spittler (1998) identified shallow landsliding problems associated with roads, which influenced the design of the road management plan. Identification of timber types, stand inventories, and growth and yield modeling had a major influence on determination of the allowable harvest and preferred silvicultural prescriptions. Continued research results will assist in the adaptive management philosophy incorporated into the Management Plan.

# Response to Comments 320.11-14

NMFS will have the opportunity to review and comment on all THPs that are generated on JDSF. The possibility of undertaking the Section 10(a)(1)(B) incidental take permit process may be considered by CDF in the future.

### References

- Cafferata, P.H. and T.E. Spittler. (1998). "Logging Impacts of the 1970's vs. the 1990's in the Caspar Creek Watershed," *Proceedings of the Conference on Coastal Watersheds: the Caspar Creek Story. General Technical Report PSW-GTR-168*. pp.103-115Albany: USDA Forest Service, Pacific Southwest Research Station.
- Ligon, F., A. Rich, G. Rynearson, D. Thornburgh, and W. Trush. (1999). *Report of the Scientific Review Panel on California Forest Practice Rules and Salmonid Habitat*. Sacramento: Resources Agency of California and the National Marine Fisheries Service.
- Napolitano, M.B. (1998). "Persistence of Historical Logging Impacts on Channel Form In Mainstem North Fork Caspar Creek," *Proceedings of the Conference on Coastal Watersheds:* the Caspar Creek Story. General Technical Report PSW-GTR-168. pp.103-115Albany: USDA Forest Service, Pacific Southwest Research Station.
- Rosgen, D.L. (1996). Applied River Morphology. Pagosa Springs: Wildland Hydrology Books.